

PART 70 OPERATING PERMIT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Conopco, Inc. d/b/a Unilever HPC USA
1200 Calumet Avenue
Hammond, Indiana 46320

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T089-6623-00229	
Issued by: _____ Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: Expiration Date:
Issued by: _____ Ronald L. Novak, Director Hammond Department of Environmental Management	

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management Office of Air Quality (IDEM-OAQ) and Hammond Department of Environmental Management (HDEM). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary soap manufacturing plant.

Responsible Official:	Plant Manager
Source Address:	1200 Calumet Avenue, Hammond, Indiana 46320
Mailing Address:	1200 Calumet Avenue, Hammond, Indiana 46320
General Source Phone Number:	(219) 659-3200
SIC Code:	2841 - Soap and Other Detergents
County Location:	Lake
Source Location Status:	Attainment for Lead, CO and NO ₂ , Severe Non-Attainment for Ozone and Non-Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- 1) Boilers, identified as follows:
 - a) Babcock-Wilcox Boiler No. 3, identified as Unit No. 2, constructed in 1932, with a maximum capacity of 82.4 MMBtu per hour, primarily natural gas fired with No. 6 fuel oil as an alternate fuel, and exhausting to Stack 2.
 - b) Babcock-Wilcox Boiler No. 4, identified as Unit No. 3, constructed in 1936, with a maximum capacity of 82.4 MMBtu per hour, primarily natural gas fired with No. 6 fuel oil as an alternate fuel, and exhausting to Stack 2.
 - c) American Hydrotherm Boiler No. 1, identified as Unit No. 16, constructed in 1985, with a maximum capacity of 12.22 MMBtu per hour, natural gas-fired only and exhausting to Stack 18.
 - d) American Hydrotherm Boiler No. 2, identified as Unit No. 29, constructed February 22, 1989, with a maximum capacity of 12.22 MMBtu per hour, primarily natural gas fired with No. 2 fuel oil as a standby fuel, and exhausting to Stack 1A.

- 2) Powerhouse Boiler No. 1, identified as Unit No. 49, constructed in 1995 and modified in 2001 to a maximum capacity of 120 MMBtu per hour, primarily natural gas fired with No. 2 fuel oil as a standby fuel, and exhausting to Stack 1.
- 3) Manufacturing Processes controlled by Dust Collector Systems, identified as follows:
 - a) Soap Rework Grinding Process, identified as Unit 11, constructed in 1979, controlled by a dust collection system, with a maximum capacity of 4,167 pounds per hour and exhausting to Stack 13.
 - b) Three (3) Vacuum System Soap Dryers, identified as Unit 12, constructed in 1979, controlled by a bag collector with a combined maximum amount of soap produced for all three dryers of 28,713 pounds per hour and exhausting to Stack 14.
 - c) Five (5) Noodles Bins and One (1) Scrap Soap Kettle, identified as Unit 13, constructed in 1979, controlled by a filter bag collector with a maximum of 32,880 pounds per hour of soap handled and exhausting to Stack 15.
 - d) Hard Soaps Finishing Lines No. 1, 2 and 3, identified as Unit 14, constructed in 1979, controlled by three (3) dust collectors, with a maximum capacity of 29,425 pounds per hour and exhausting to Stack 16.
 - e) Hard Soaps Finishing Lines No. 5, 7 and 8, identified as Unit 15, constructed in 1979, controlled by three (3) dust collectors, with a maximum capacity of 29,425 pounds per hour and exhausting to Stack 17.
 - f) Soap Noodle Bin No. 1 Dust Collection System (DC-5), identified as Unit 18, constructed in 1985, used to control soap dust from the transfer of soap noodles or pellets via an air conveyor system to Noodle Bins No. 1, 2, 3, or 4 (connected to a common header), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 20.
 - g) Soap Noodle Bin No. 2 Dust Collection System (DC-6), identified as Unit 19, constructed in 1985, used to control soap dust from the transfer of soap noodles or pellets via an air conveyor system to Noodle Bins No. 1, 2, 3, or 4 (connected to a common header), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 21.
 - h) Soap Noodle Bin No. 3 Dust Collection System (DC-7), identified as Unit 20, constructed in 1985, used to control soap dust from the transfer of soap noodles or pellets via an air conveyor system to Noodle Bins No. 1, 2, 3, or 4 (connected to a common header), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 22.
 - i) Chip Mixer No. 1, identified as Unit No. 21, constructed in 1985, controlled by a dust collection system (DC-8), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 23.
 - j) Chip Mixer No. 2, identified as Unit No. 22, constructed in 1985, controlled by a dust collection system (DC-9), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 23.

- k) Chip Mixer Nos. 3 and 4, identified as Unit No. 23, constructed in 1985, controlled by a dust collection system (DC-10), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 23.
- l) Powder Dye Mixing System, identified as Unit 24, constructed in 1985, controlled by a dust collection system (DC-4), with a maximum capacity of 10 pounds per hour and exhausting to Stack 26.
- m) Zinc Oxide Catalyst Weigh Station and three Chill Rolls (Lines 1, 2, & 3), identified as Unit 25, constructed in 1985, controlled by a dust collection system (DC-3), with a maximum design rate of soap to be processed of 18,000 pounds per hour and exhausting to Stack 27.
- n) Detergent Bar Soap Facility Milling and Pelletizing, identified as Unit 26, constructed in 1985, controlled by a dust collection system (DC-1), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 28.
- o) Three (3) Chill Roll Apron Conveyors and Screw Conveyors (Lines 1, 2, & 3), identified as Unit 27, constructed in 1985, controlled by a dust collection system (DC-2), with a maximum capacity of 18,000 pounds per hour and exhausting to Stack 29.
- p) Flex-Kleen Dust Collector System (DC-1053), identified as Unit 31, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 3A.
- q) Flex-Kleen Dust Collector System (DC-1054), identified as Unit 32, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 4A.
- r) Flex-Kleen Dust Collector System (DC-1055), identified as Unit 33, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 5A.
- s) Flex-Kleen Dust Collector System (DC-1056), identified as Unit 34, constructed in 1990, used to control the exhaust from a soap noodle bin, a rework feed hopper, a remelt hopper, and Detergent Bar Soap Manufacturing Line No. 5 Noodle Bin when producing product, and Line No. 4, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 6A.

- t) Flex-Kleen Dust Collector System (DC-1052), identified as Unit 35, constructed in 1990, used to control the exhaust from pick-up points along Bar Soap Finishing Lines #4 and #5. Pick-up points are distributed for maximum dust reduction along the lines including plodder/extruder hoppers, duplex refiners, apron/screw conveyors, incline conveyors, pelletizing refiners, noodle hoppers, and chip mixers, rework grinder and the TiO₂ dump station. The unit has a maximum capacity of 5,976 pounds per hour and exhausts to stack 7A.
 - u) Flex-Kleen Dust Collector System (DC-1051), identified as Unit 36, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausts to stack 8A.
 - v) Sample Detergent Bar Soap Line, identified as Unit 45, constructed in 1979, including soap supply hopper, conveyors, refiner feed hopper and soap return conveyors, controlled by a dust collector, with a maximum design rate of 1,688 pounds per hour of material handled and exhausting to Stack 17A.
 - w) No. 1 and No. 2 Noodle Bins, identified as Unit 48, constructed in 1979, controlled by a dust collector, with a maximum capacity of 10,000 pounds per hour and exhausting to Stack 46.
- 4) Manufacturing Processes controlled by wet scrubber systems:
- a) Seven (7) liquid "Drais" mixers, two (2) reactors, and two (2) strippers (for Lines 4 through 7), identified as Unit 30, constructed in 1990, controlled by a Schneible wet scrubber and demister collection system. In case of a rupture disk failure, emissions from knockout tanks H-30675 and H-30676 will also be controlled by this system. This system also includes Line 4 melt tank and hold tank, and Lines 5, 6, and 7 melt tanks. In addition, the three (3) Holding Tanks and Melt Tanks from Lines 1, 2, & 3 are tied into this system for housekeeping purposes. The scrubber-demister system has a maximum capacity of 1,743 pounds per hour of material handled and exhausts to Stack 2A.
 - b) Three (3) liquid "Drais" mixers, two (2) reactors, and (2) two strippers (for Lines 1 through 3), identified as Unit 17, constructed in 1985, controlled by a Schneible wet scrubber and demister collector system. In case of a rupture disk failure, emissions from knockout tanks H-30673 and H-30674 will also be controlled by this system. System has a maximum capacity of 5,049 pounds per hour of material handled and exhausts to Stack 19.
- 5) Soap Dryer/Cleanout Systems identified as follows:
- a) Soap Dryer/Cleanout System Tank No. 1, identified as Unit 46, constructed in 1979, used to clean the interiors of the three (3) soap dryers in the Bar Finishing Department, controlled by a mist eliminator, with a maximum amount of fatty acid recirculated of 168,000 pounds per hour and exhausting to Stack 18A.

- b) Soap Dryer/Cleanout System Tank No. 2, identified as Unit 47, constructed in 1979, used to clean the interiors of the three (3) soap dryers in the Bar Finishing Department, controlled by an impingement separator, with a maximum amount of fatty acid circulated of 168,000 pounds per hour, and exhausting to Stack 19A.
- 6) Storage Tank, identified as follows:

Fuel Oil Day Tank, identified as Unit 62, constructed in 2001, with a maximum design capacity of 18,000 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.
- 7) Sulfonation Process, including a sulfur burner, SO₂ heat exchanger, catalytic gas converter, an SO₃ heat exchanger, reactor, sulfuric acid scrubber, electrostatic precipitator, caustic scrubbing tower and a demister, identified as Unit 4, constructed in 1967, with a maximum production rate of alkyl benzene sulfonic acid of 6,500 pounds per hour and exhausting to Stack 4.
- 8) Preservative Addition System, identified as Unit 50, constructed in 1997, and controlled by primary and secondary filters, in which preservative powder is vacuum transferred at a maximum rate of 2,000 pounds per hour to a vacuum receiver atop a mixing tank. The preservative is mixed with perfume for subsequent addition to the soap process.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Two (2) laboratories. [326 IAC 2-7-1(21)(D)]
- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour. [326 IAC 2-7-1(21)(G)(i)(BB)]
- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons. [326 IAC 2-7-1(21)(G)(ii)(AA)]
- (d) The following VOC and HAP storage containers:
 - A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons. (Building 14 dye mixing tanks)
 - B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids. [326 IAC 2-7-1(G)(iii)(AA)&(BB)]
- (e) Production related activities, including application of oils, greases, lubricants, and nonvolatile materials as temporary protective coatings; degreasing operations that do not exceed 145 gallons per 12 months; brazing, cutting torches, soldering and welding; and closed loop heating and cooling systems. [326 IAC 2-7-1(21)(G)(vi)(AA),(CC),(EE)&(FF)]
- (f) Cleaners and solvents characterized as follows:
 - A) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;

- B) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
[326 IAC 2-7-1(G)(vi)(DD)]
- (g) Noncontact cooling tower systems with either of the following:
Natural draft cooling towers not regulated under a NESHAP.
Forced and induced draft cooling tower system not regulated under a NESHAP.
[326 IAC 2-7-1(G)(ix)(FF)]
- (h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment. [326 IAC 2-7-1(21)(G)(x)(AA)]
- (i) Heat exchanger cleaning and repair. [326 IAC 2-7-1(G)(x)(BB)]
- (j) Paved and unpaved roads and parking lots with public access. [326 IAC 2-7-1(21)(G)(xiii)]
- (k) Asbestos abatement projects regulated by 326 IAC 14-10. [326 IAC 2-7-1(21)(G)(xvi)]
- (l) Routine maintenance and repair of buildings. [326 IAC 2-7-1(21)(G)(xvii)]
- (m) Flue gas conditioning systems and associated chemicals. [326 IAC 2-7-1(21)(G)(xviii)]
- (n) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup. [326 IAC 2-7-1(21)(G)(xix)]
- (o) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower. [326 IAC 2-7-1(G)(xx)(AA)-(EE)]
- (p) On-site fire and emergency response training approved by the department.
[326 IAC 2-7-1(G)(xxii)(AA)]
- (q) Emergency generators as follows:
Gasoline generators not exceeding 110 horsepower.
Diesel generators not exceeding 1600 horsepower.
Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
[326 IAC 2-7-1(21)(G)(xxii)(BB)]
- (r) Other emergency equipment as follows:
Stationary, diesel fire pumps and rental air compressor.
[326 IAC 2-7-1(21)(G)(xxii)(CC)]
- (s) Coalescer media changeout. [326 IAC 2-7-1(21)(G)(xxv)]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

- (a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, HDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by HDEM.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM-OAQ and HDEM within a reasonable time, any information that IDEM-OAQ and HDEM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM-OAQ and HDEM copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U.S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)].
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM-OAQ and HDEM on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM-OAQ and HDEM may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s)/position title responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM-OAQ and HDEM upon request and within a reasonable time, and shall be subject to review and approval by IDEM-OAQ and HDEM. IDEM-OAQ and HDEM may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM-OAQ and HDEM within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM-OAQ

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

HDEM

Telephone Number: 219-853-6306
Facsimile Number: 219-853-6343

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM-OAQ and HDEM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM-OAQ and HDEM by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.13 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM-OAQ and HDEM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable

requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM-OAQ or HDEM has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM-OAQ or HDEM has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM-OAQ or HDEM determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM-OAQ or HDEM to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM-OAQ or HDEM at least

thirty (30) days in advance of the date this permit is to be reopened, except that IDEM-OAQ or HDEM may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM-OAQ and HDEM and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(40) and 326 IAC 2-7-1(21). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

- (1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM-OAQ and HDEM on or before the date it is due.

- (2) If IDEM-OAQ and HDEM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM-OAQ and HDEM take final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM-OAQ and HDEM, any additional information identified as being needed to process the application.

- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM-OAQ and HDEM fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;

- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM-OAQ and HDEM in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification to IDEM-OAQ or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM-OAQ, HDEM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, any records that must be kept under the conditions of this permit;
- (c) Inspect, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
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The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM-OAQ and HDEM within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM-OAQ and HDEM, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-1-11.1]

The Permittee shall be in violation of 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), if the opacity of fugitive particulate emissions exceeds ten percent (10%).

C.6 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

The Permittee shall comply with the applicable provisions of 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures).

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers

and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.10 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM-OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM-OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM-OAQ and HDEM not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM-OAQ and HDEM if the source submits to IDEM – OAQ and HDEM, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission units, compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.13 Continuous Compliance Plan [326 IAC 6-1-10.1(l)]

Pursuant to 326 IAC 6-1-10.1(l) (Lake County PM10 Emission Requirements), the Permittee shall submit to IDEM and HDEM, and maintain at the source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring, and record keeping requirements as specified in 326 IAC 6-1-10.1(p) through (r) or according to the Permittee's CCP.

C.14 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D

of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than once an hour until such time as the continuous monitor is back in operation.

- (b) The Permittee shall install, calibrate, quality-assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.15 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.16 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3) [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) The Permittee may request the IDEM-OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.17 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on January 2, 2001.
- (b) If the ERP is disapproved by IDEM-OAQ, and HDEM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) Upon direct notification by IDEM-OAQ, and HDEM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.18 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or

- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

C.19 Compliance Response Plan – Preparation, Implementation, Records, and Reports [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM-OAQ and HDEM upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee’s current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee’s current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.20 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM-OAQ and HDEM within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM-OAQ and HDEM that retesting in one-hundred and twenty (120) days is not practicable, IDEM-OAQ and HDEM may extend the retesting deadline.
- (c) IDEM-OAQ and HDEM reserve the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.21 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

- (1) Indicate estimated emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated emissions of other regulated pollutants (as defined by 326 IAC 2- 7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM-OAQ and HDEM on or before the date it is due.

C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM-OAQ and HDEM on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.24 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Boilers, identified as follows:

- a) Babcock-Wilcox Boiler No. 3, identified as Unit No. 2, constructed in 1932, with a maximum capacity of 82.4 MMBtu per hour, primarily natural gas fired with No. 6 fuel oil as an alternate fuel, and exhausting to Stack 2.
- b) Babcock-Wilcox Boiler No. 4, identified as Unit No. 3, constructed in 1936, with a maximum capacity of 82.4 MMBtu per hour, primarily natural gas fired with No. 6 fuel oil as an alternate fuel, and exhausting to Stack 2.
- c) American Hydrotherm Boiler No. 1, identified as Unit No. 16, constructed in 1985, with a maximum capacity of 12.22 MMBtu per hour, natural gas-fired only and exhausting to Stack 18.
- d) American Hydrotherm Boiler No. 2, identified as Unit No. 29, constructed February 22, 1989, with a maximum capacity of 12.22 MMBtu per hour, primarily natural gas fired with No. 2 fuel oil as a standby fuel, and exhausting to Stack 1A.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 Particulate Matter less than 10 microns (PM₁₀) Lake County Rule [326 IAC 6-1-10.1(d)]
Pursuant to 326 IAC 6-1-10.1(d), the PM and PM₁₀ emissions from the boilers shall not exceed the pounds per hour emission rate or the pounds per million Btu limits as follows:

Emission Unit Description	Emission Unit ID #	Emission Limit (lbs/MMBtu)	Emission Limit (lbs/hr)
Babcock-Wilcox Boiler #3 & #4	2 & 3	0.116*	18.88*
American Hydrotherm Boiler No. 2	29	0.150	1.830

*Combined limit for Boilers 3 & 4

- D.1.2 Particulate Matter less than 10 microns (PM₁₀) Lake Country Rule [326 IAC 6-1-10.1(h)]
Pursuant to 6-1-10.1(h) the American Hydrotherm Boiler No. 1, Unit 16, shall fire natural gas only and shall not exceed 0.003 pounds per MMBtu heat input rate or 0.040 pounds per hour while combusting fuel.

- D.1.3 Sulfur Dioxide (SO₂) [326 IAC 7-4-1.1(c)(13)]
Pursuant to 326 IAC 7-4-1.1(c)(13) (SO₂ Emissions Limitations), the following sources shall not exceed the SO₂ emissions in pounds per million Btu:

Emission Unit Description	Emission Unit ID #	SO ₂ Emission Limit (lbs/mmBtu)
Babcock-Wilcox Boiler #3	2	1.52
Babcock-Wilcox Boiler #4	3	1.52

D.1.4 Sulfur Dioxide (SO₂) [326 IAC 7-4-1.1(a)]

Pursuant to 326 IAC 7-4-1.1(a) (SO₂ Emissions Limitations), the SO₂ emissions from American Hydrotherm Boiler No. 2 shall not exceed three-tenths (0.3) pound per million Btu (lb/MMBtu) heat input while combusting fuel oil.

D.1.5 Sulfur Dioxide (SO₂) [Hammond Ordinance No. 3522]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the sulfur content by weight of the fuel oil burned shall be limited as follows:

Emission Unit Description	Emission Unit ID #	Maximum Sulfur Content by Weight
Babcock-Wilcox Boiler #3	2	1.43%
Babcock-Wilcox Boiler #4	3	1.43%
American Hydrotherm Boiler #2	29	0.5%

These local limits are not state or federally enforceable. They are only enforceable by HDEM.

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.1.7 Sulfur Dioxide Emissions and Sulfur Content

Compliance with Conditions D.1.3 and D.1.4 shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed the limited heat input in Conditions D.1.3 and D.1.4 by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the facilities using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.8 Visible Emissions Notations

- (a) Visible emission notations of the boilers stack exhausts shall be performed once per shift during normal daylight operations while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.3 through D.1.5, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limit established in Conditions D.1.3 and D.1.4.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration

and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.1.8, the Permittee shall maintain records of visible emission notations of the Stacks 18, 2, and 3 exhaust while combusting fuel oil.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

- (a) A natural gas-fired boiler certification, signed by the responsible official, that certifies all of the fuels combusted during the period. The certification does require the certification by the responsible official as defined by 326 IAC 2-7-1(34);
- (b) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported.
- (c) A semi-annual summary of the information to document compliance with Conditions D.1.1 through D.1.5 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Powerhouse Boiler No. 1, identified as Unit No. 49, constructed in 1995 and modified in 2001 to a maximum capacity of 120 MMBtu per hour, primarily natural gas fired with No. 2 fuel oil as a standby fuel, and exhausting to Stack 1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 PSD and Emission Offset Minor Limit [326 IAC 2-2 and 326 IAC 2-3]

The oil usage for Powerhouse Boiler No. 1 shall not exceed 600 thousand gallons (mgal) of No. 2 fuel oil per 365 consecutive day period. This limitation is equivalent to a potential to emit twenty-five (25) tons of NO_x per year when natural gas is used for the remainder of the 365 consecutive day period. Compliance with this limit makes 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (PSD) not applicable.

D.2.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart Db] [326 IAC 6-1-2] [326 IAC 7-1.1]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), emissions from Powerhouse Boiler No. 1 shall not exceed the following:

- (a) Five-hundredths (0.05) pound PM per million Btu (MMBtu) heat input.
- (b) Twenty percent (20%) opacity except for one six-minute period per hour of not more than twenty-seven (27%) opacity.
- (c) Five-tenths (0.5) pound SO₂ per million Btu (MMBtu) heat input and 90% reduction in SO₂ emissions.
- (d) Two-tenths (0.20) pound NO_x per million Btu (MMBtu) heat input.

Compliance with this limitation shall satisfy the PM and SO₂ requirements of 326 IAC 6-1-2 and 326 IAC 7-1.1, respectively.

D.2.3 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(b)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the Powerhouse Boiler No. 1 shall be limited to 0.01 grain per dry standard cubic foot (natural gas) and 0.15 lb/MMBtu (fuel oil).

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Performance testing shall be conducted in accordance with 40 CFR 60.7 and 60.8. IDEM, OAQ may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, OAQ or HDEM, compliance with the limits specified in Conditions D.2.1 through D.2.2 shall be determined by a performance test conducted in accordance with Section C – Performance Testing.

D.2.6 NSPS Compliance Provisions [326 IAC 12] [40 CFR 60, Subpart Db]

- (a) The PM and opacity emission limitations in Condition D.2.2 apply at all times, except during periods of startup, shutdown or malfunction.
- (b) The SO₂ and NO_x emission limitations in Condition D.2.2 apply at all times, including periods of startup, shutdown, and malfunction.
- (c) Compliance with the SO₂ emission limitation and percent reduction in Condition D.2.2 shall be determined by the use of “very low sulfur oil” in accordance with 40 CFR 60.42b(j).
- (d) Compliance with the PM and opacity emission limitations in Condition D.2.2 shall be determined by the methods and procedures specified in 40 CFR 60.46b(d).
- (e) Compliance with the NO_x emission limitation in Condition D.2.2 shall be determined by the methods and procedures specified in 40 CFR 60.46b(e).

D.2.7 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3-7-4] [326 IAC 7-1.1-2(a)(3)]

Compliance with the sulfur dioxide emission limitations and content limitations in Condition D.2.2 shall be determined by maintaining the fuel receipts in accordance with 40 CFR 60.49b(r) to demonstrate that the oil meets the definition of “very low sulfur oil” in 40 CFR 60.41b.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.8 Visible Emissions Notations

- (a) Visible emission notations of the exhaust from Stack 1 shall be performed once per shift during normal daylight operations while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.9 Preventive Inspections

- (a) The following inspections shall be performed at least once every two years in accordance with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan:
 - (1) Start-up and shutdown practices; and
 - (2) Spare parts availability.
- (b) Inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past twelve months.
- (c) Appropriate response steps for any discrepancies in the above list found during the inspection shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the NO_x and SO₂ emission limits established in Conditions D.2.1 and D.2.2.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

 - (4) Fuel supplier certifications;
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (b) To document compliance with Condition D.2.1, the Permittee shall maintain daily records of the quantity in gallons of #2 fuel oil burned.
- (c) To document compliance with Condition D.2.8, the Permittee shall maintain records of visible emission notations of the Stack 1 exhaust while combusting fuel oil.
- (d) To document compliance with Condition D.2.9, the Permittee shall maintain records of inspections as specified in Condition D.2.9 (b).
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.11 Reporting Requirements

- (a) A quarterly summary of the quantity of fuel oil burned to document compliance with Condition D.2.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The Permittee shall certify, on the form provided, that natural gas was fired in the boiler at all times during each quarter. Alternatively, the Permittee shall report the number of days during which an alternate fuel was burned during each quarter.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Manufacturing Processes controlled by Dust Collector Systems, identified as follows:

- a) Soap Rework Grinding Process, identified as Unit 11, constructed in 1979, controlled by a dust collection system, with a maximum capacity of 4,167 pounds per hour and exhausting to Stack 13.
- b) Three (3) Vacuum System Soap Dryers, identified as Unit 12, constructed in 1979, controlled by a bag collector with a combined maximum amount of soap produced for all three dryers of 28,713 pounds per hour and exhausting to Stack 14.
- c) Five (5) Noodles Bins and One (1) Scrap Soap Kettle, identified as Unit 13, constructed in 1979, controlled by a filter bag collector with a maximum of 32,880 pounds per hour of soap handled and exhausting to Stack 15.
- d) Hard Soaps Finishing Lines No. 1, 2 and 3, identified as Unit 14, constructed in 1979, controlled by three (3) dust collectors, with a maximum capacity of 29,425 pounds per hour and exhausting to Stack 16.
- e) Hard Soaps Finishing Lines No. 5, 7 and 8, identified as Unit 15, constructed in 1979, controlled by three (3) dust collectors, with a maximum capacity of 29,425 pounds per hour and exhausting to Stack 17.
- f) Soap Noodle Bin No. 1 Dust Collection System (DC-5), identified as Unit 18, constructed in 1985, used to control soap dust from the transfer of soap noodles or pellets via an air conveyor system to Noodle Bins No. 1, 2, 3, or 4 (connected to a common header), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 20.
- g) Soap Noodle Bin No. 2 Dust Collection System (DC-6), identified as Unit 19, constructed in 1985, used to control soap dust from the transfer of soap noodles or pellets via an air conveyor system to Noodle Bins No. 1, 2, 3, or 4 (connected to a common header), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 21.
- h) Soap Noodle Bin No. 3 Dust Collection System (DC-7), identified as Unit 20, constructed in 1985, used to control soap dust from the transfer of soap noodles or pellets via an air conveyor system to Noodle Bins No. 1, 2, 3, or 4 (connected to a common header), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 22.
- i) Chip Mixer No. 1, identified as Unit No. 21, constructed in 1985, controlled by a dust collection system (DC-8), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 23.
- j) Chip Mixer No. 2, identified as Unit No. 22, constructed in 1985, controlled by a dust collection system (DC-9), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 23.

- k) Chip Mixer Nos. 3 and 4, identified as Unit No. 23, constructed in 1985, controlled by a dust collection system (DC-10), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 23.
- l) Powder Dye Mixing System, identified as Unit 24, constructed in 1985, controlled by a dust collection system (DC-4), with a maximum capacity of 10 pounds per hour and exhausting to Stack 26.
- m) Zinc Oxide Catalyst Weigh Station and three Chill Rolls (Lines 1, 2, & 3), identified as Unit 25, constructed in 1985, controlled by a dust collection system (DC-3), with a maximum design rate of soap to be processed of 18,000 pounds per hour and exhausting to Stack 27.
- n) Detergent Bar Soap Facility Milling and Pelletizing, identified as Unit 26, constructed in 1985, controlled by a dust collection system (DC-1), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 28.
- o) Three (3) Chill Roll Apron Conveyors and Screw Conveyors (Lines 1, 2, & 3), identified as Unit 27, constructed in 1985, controlled by a dust collection system (DC-2), with a maximum capacity of 18,000 pounds per hour and exhausting to Stack 29.
- p) Flex-Kleen Dust Collector System (DC-1053), identified as Unit 31, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 3A.
- q) Flex-Kleen Dust Collector System (DC-1054), identified as Unit 32, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 4A.
- r) Flex-Kleen Dust Collector System (DC-1055), identified as Unit 33, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 5A.
- s) Flex-Kleen Dust Collector System (DC-1056), identified as Unit 34, constructed in 1990, used to control the exhaust from a soap noodle bin, a rework feed hopper, a remelt hopper, and Detergent Bar Soap Manufacturing Line No. 5 Noodle Bin when producing product, and Line No. 4, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 6A.

- t) Flex-Kleen Dust Collector System (DC-1052), identified as Unit 35, constructed in 1990, used to control the exhaust from pick-up points along Bar Soap Finishing Lines #4 and #5. Pick-up points are distributed for maximum dust reduction along the lines including plodder/extruder hoppers, duplex refiners, apron/screw conveyors, incline conveyors, pelletizing refiners, noodle hoppers, and chip mixers, rework grinder and the TiO₂ dump station. The unit has a maximum capacity of 5,976 pounds per hour and exhausts to stack 7A.
- u) Flex-Kleen Dust Collector System (DC-1051), identified as Unit 36, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausts to stack 8A.
- v) Sample Detergent Bar Soap Line, identified as Unit 45, constructed in 1979, including soap supply hopper, conveyors, refiner feed hopper and soap return conveyors, controlled by a dust collector, with a maximum design rate of 1,688 pounds per hour of material handled and exhausting to Stack 17A.
- w) No. 1 and No. 2 Noodle Bins, identified as Unit 48, constructed in 1979, controlled by a dust collector, with a maximum capacity of 10,000 pounds per hour and exhausting to Stack 46.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [Hammond Ordinance No. 3522]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM emissions from the Zinc Oxide Catalyst Weigh Station, Unit 25, shall not exceed 0.021 pounds per hour or 0.092 tons per year; PM emissions from the Detergent Bar Soap Facility Milling and Pelletizing, Unit 26, shall not exceed 0.79 pounds per hour or 3.45 tons per year; and PM emissions from the No. 1 & No. 2 Noodle Bins, Unit 48, shall not exceed 0.006 pounds per hour or 0.0263 tons per year.

These local limits are not state or federally enforceable. They are only enforceable by HDEM.

D.3.2 Particulate Matter (PM₁₀) Limit [Hammond Ordinance No. 3522]

Pursuant to Hammond Ordinance No. 3522, PM₁₀ emissions from the No. 1 and No. 2 Noodle Bins, Unit 48, shall not exceed 0.0042 pounds per hour or 0.0184 tons per year.

These local limits are not state or federally enforceable. They are only enforceable by HDEM.

- D.3.3 Particulate Matter less than 10 microns (PM₁₀) Lake County Rule [326 IAC 6-1-10.1(d)]
Pursuant to 326 IAC 6-1-10.1(d), the PM₁₀ emissions from the manufacturing emission units shall not exceed the following emission limitations:

Emission Unit Description	Emission Unit ID #	PM ₁₀ Emission Limit (gr/dscf)	PM ₁₀ Emission Limit (lbs/hr)
Soap Rework Grinding Process	11	0.020	0.250
Three (3) Vacuum System Soap Dryers	12	0.020	0.120
Five (5) Noodles Bins and One (1) Scrap Soap Kettle	13	0.020	0.860
Hard Soaps Finishing Lines No. 1, 2 and 3	14	0.020*	1.540*
Hard Soaps Finishing Lines No. 5, 7, and 8	15	0.020*	1.540*
Soap Noodle Bin No. 1 Dust Collection System	18	0.020	0.210
Soap Noodle Bin No. 2 Dust Collection System	19	0.020	0.210
Soap Noodle Bin No. 3 Dust Collection System	20	0.020	0.210
Chip Mixer No. 1	21	0.020**	0.720**
Chip Mixer No. 2	22	0.020**	0.720**
Chip Mixer No. 3 and 4	23	0.020**	0.720**
Powder Dye Mixing System	24	0.020	0.130
Zinc Oxide Catalyst Weigh Station and Three Chill Rolls	25	0.020	0.800
Detergent Bar Soap Facility Milling and Pelletizing	26	0.020	1.03
Three (3) Chill Roll Apron Conveyors and Screw Conveyors	27	0.020	1.090
Flex-Kleen Dust Collector System (DC-1053)	31	0.020	0.940
Flex-Kleen Dust Collector System (DC-1054)	32	0.020	0.940
Flex-Kleen Dust Collector System (DC-1055)	33	0.020	0.940
Flex-Kleen Dust Collector System (DC-1056)	34	0.020	0.940
Flex-Kleen Dust Collector System (DC-1052)	35	0.020	2.130
Flex-Kleen Dust Collector System (DC-1051)	36	0.020	2.130
Sample Detergent Bar Soap Line	45	0.002***	0.002

*Combined limit for Units 14 and 15, exhausting to Stacks 16 and 17

**Combined limit for Units 21, 22 and 23, exhausting to Stack 23

***Emission limitation units are lbs/ton

- D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]
A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

- D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
Within 36 months after issuance of this permit, a performance test shall be conducted for Units 11, 12, 13, 14, 18, 21, 26, and 27 in order to demonstrate compliance with Conditions D.3.2 and D.3.3. The Permittee shall perform PM-10 testing utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C – Performance Testing.
- D.3.6 Particulate Matter (PM)
The dust collection systems for PM control shall be in operation and control emissions from these facilities at all times when the facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.7 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts from these facilities shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse used in conjunction with the manufacturing processes, at least once weekly when the processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across each baghouse is outside the normal range of 1.0 and 8.0 inches of water, a range established during the latest stack test or as recommended by the equipment manufacturer, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM – OAQ and HDEM and shall be calibrated at least once every six (6) months.

D.3.9 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the manufacturing processes when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.3.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the

timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.11 Record Keeping Requirements

- (a) To document compliance with Condition D.3.7, the Permittee shall maintain records of daily visible emission notations of the stack exhaust from each facility.
- (b) To document compliance with Condition D.3.8, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
 - (2) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.3.9, the Permittee shall maintain records of the results of inspections required under Condition D.3.9 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Manufacturing Processes controlled by wet scrubber systems:

- a) Seven (7) liquid "Drais" mixers, two (2) reactors, and two (2) strippers (for Lines 4 through 7), identified as Unit 30, constructed in 1990, controlled by a Schneible wet scrubber and demister collection system. In case of a rupture disk failure, emissions from knockout tanks H-30675 and H-30676 will also be controlled by this system. This system also includes Line 4 melt tank and hold tank, and Lines 5, 6, and 7 melt tanks. In addition, the three (3) Holding Tanks and Melt Tanks from Lines 1, 2, & 3 are tied into this system for housekeeping purposes. The scrubber-demister system has a maximum capacity of 1,743 pounds per hour of material handled and exhausts to Stack 2A.
- b) Three (3) liquid "Drais" mixers, two (2) reactors, and (2) two strippers (for Lines 1 through 3), identified as Unit 17, constructed in 1985, controlled by a Schneible wet scrubber and demister collector system. In case of a rupture disk failure, emissions from knockout tanks H-30673 and H-30674 will also be controlled by this system. System has a maximum capacity of 5,049 pounds per hour of material handled and exhausts to Stack 19.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.4.1 Particulate Matter less than 10 microns (PM₁₀) Lake County Rule [326 IAC 6-1-10.1(d)]
Pursuant to 326 IAC 6-1-10.1(d), the PM₁₀ emissions from the manufacturing emission units shall not exceed the following emission limitations:

Emission Unit Description	Emission Unit ID #	PM ₁₀ Emission Limit (gr/dscf)	PM ₁₀ Emission Limit (lbs/hr)
Schneible Wet Scrubber controlling seven (7) liquid "Drais" mixers, two (2) reactors, and two (2) strippers	30	0.030	1.030
Schneible Wet Scrubber controlling three (3) liquid "Drais" mixers, two (2) reactors, and (2) two strippers	17	0.030	1.030

- D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]
A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

- D.4.3 Particulate Matter (PM)
The wet scrubber collector system for PM control shall be in operation and control emissions from these facilities at all times that the facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.4 Visible Emissions Notations

- (a) Visible emission notations of the exhaust from Stacks 2A and 19 shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.4.5 Parametric Monitoring

The Permittee shall record the flow rate and total static pressure drop across each scrubber used in conjunction with Units 30 and 17 at least once daily when in operation. When for any one reading, the pressure drop across the scrubbers is outside the normal range of 5.0 and 10.0 inches of water, a range established during the latest stack test or as recommended by the equipment manufacturer, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.4.6 Scrubber Inspections

An inspection shall be performed each calendar quarter of all scrubbers controlling these facilities. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.

D.4.7 Scrubber Failure Detection

In the event that a scrubber's failure has been observed:

- (a) The affected unit will be shut down immediately until the failed unit has been replaced.
- (b) Based upon the confirmed findings of an inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.8 Record Keeping Requirements

- (a) To document compliance with Condition D.4.4 the Permittee shall maintain daily records of visible emission notations of the stack exhausts from each facility.

- (b) To document compliance with Condition D.4.5, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure;
 - (B) Air to water ratio; and
 - (C) Flow rate.
- (c) To document compliance with Condition D.4.6, the Permittee shall maintain records of the results of inspections.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Soap Dryer/Cleanout Systems identified as follows:

- a) Soap Dryer/Cleanout System Tank No. 1, identified as Unit 46, constructed in 1979, used to clean the interiors of the three (3) soap dryers in the Bar Finishing Department, controlled by a mist eliminator, with a maximum amount of fatty acid recirculated of 168,000 pounds per hour and exhausting to Stack 18A.
- b) Soap Dryer/Cleanout System Tank No. 2, identified as Unit 47, constructed in 1979, used to clean the interiors of the three (3) soap dryers in the Bar Finishing Department, controlled by an impingement separator, with a maximum amount of fatty acid circulated of 168,000 pounds per hour, and exhausting to Stack 19A.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.5.1 Particulate Matter less than 10 microns (PM₁₀) Lake County Rule [326 IAC 6-1-10.1(d)]
Pursuant to 326 IAC 6-1-10.1(d), the PM₁₀ emissions from the manufacturing emission units shall not exceed the following emission limitations:

Emission Unit Description	Emission Unit ID #	PM ₁₀ Emission Limit (gr/dscf)	PM ₁₀ Emission Limit (lbs/hr)
Soap Dryer/Cleanout System Tank No. 1	46	0.030	0.390
Soap Dryer/Cleanout System Tank No. 2	47	0.030	0.300

- D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]
A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

- D.5.3 Particulate Matter (PM)
The control devices shall be in operation and control emissions from these facilities at all times that the facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.5.4 Visible Emissions Notations
(a) Visible emission notations of the Stack 18A and Stack 19A exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.5 Record Keeping Requirements

- (a) To document compliance with Condition D.5.4 the Permittee shall maintain daily records of visible emission notations of the stack exhausts from each facility.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Storage Tank, identified as follows:

Fuel Oil Day Tank, identified as Unit 62, constructed in 2001, with a maximum design capacity of 18,000 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOCs) [326 IAC 8-9]

Pursuant to 326 IAC 8-9-1, stationary vessels used to store volatile organic liquid (VOL) that are located in Lake County and have a capacity of less than thirty-nine thousand (39,000) gallons are subject to the reporting and record keeping provisions of section 6(a) and 6(b) of this rule and are exempt from all other provisions of this rule.

Any change or modification to this facility that would increase potential volatile organic compound (VOC) emissions, as specified in 326 IAC 2-1, must be approved by the Office of Air Quality (OAQ) and HDEM before such change or modification can occur.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.2 Monitoring

Monitoring of this facility is not specifically required by this permit. However, any change or modification to this facility, as specified in 326 IAC 2-1 may require this facility to have monitoring requirements.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.3 Record Keeping Requirements

Pursuant to 326 IAC 8-9-6(a) and (b), the Permittee shall keep the following records for life of the vessel:

- (a) The vessel identification number.
- (b) The vessel dimensions.
- (c) The vessel capacity.

SECTION D.7

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Sulfonation Process, including a sulfur burner, SO₂ heat exchanger, catalytic gas converter, an SO₃ heat exchanger, reactor, sulfuric acid scrubber, electrostatic precipitator, caustic scrubbing tower and a demister, identified as Unit 4, constructed in 1967, with a maximum production rate of alkyl benzene sulfonic acid of 6,500 pounds per hour and exhausting to Stack 4.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.7.1 Particulate Matter less than 10 microns (PM₁₀) Lake County Rule [326 IAC 6-1-10.1(d)]
Pursuant to 326 IAC 6-1-10.1(d), the PM₁₀ emissions from the Sulfonation Process shall not exceed 0.205 pounds per ton of material processed or 0.390 pounds per hour.
- D.7.2 Sulfur Dioxide (SO₂) [326 IAC 7-4-1.1]
Pursuant to 326 IAC 7-4-1.1(c)(13) (SO₂ Emissions Limitations), the SO₂ emissions from the Sulfonation Process shall not exceed 3.1 pounds per ton of material processed or 10.075 pounds per hour.
- D.7.3 Sulfuric Acid (H₂SO₄) Mist Limit [Hammond Ordinance No. 3522]
Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), H₂SO₄ emissions from the Sulfonation Process shall not exceed 0.052 pounds per hour or 0.228 tons per year.
- These local limits are not state or federally enforceable. They are only enforceable by HDEM.
- D.7.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]
A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

- D.7.5 Emissions Control
The sulfuric acid scrubber and electrostatic precipitator shall be in operation and control emissions from the Sulfonation Process at all times that the facility is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.7.6 Visible Emissions Notations
- (a) Visible emission notations of the Sulfonation stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
 - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.7.7 Parametric Monitoring

- (a) The Permittee shall monitor the amperage on the fan motor of the electrostatic precipitator used in conjunction with the Sulfonation Process, at least once daily when the process is in operation. The Compliance Response Plan for this unit shall contain troubleshooting and response steps for when the amperage is outside of the normal range as recommended by the manufacturer.
- (b) The Permittee shall record the flow rate and total static pressure drop across each scrubber used in conjunction with this facility at least once daily when in operation. When for any one reading, the pressure drop across the scrubbers is outside the normal range of 5.0 and 10.0 inches of water, a range established during the latest stack test or as recommended by the equipment manufacturer, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.7.8 Electrostatic Precipitator Inspections

An inspection shall be performed each calendar quarter of the electrostatic precipitator controlling this facility. Confirmed defective electrostatic precipitator part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of electrostatic precipitator part(s) replaced.

D.7.9 Electrostatic Precipitator Failure Detection

In the event that an electrostatic precipitator 's failure has been observed:

- (a) The affected unit will be shut down immediately until the failed unit has been replaced.
- (b) Based upon the confirmed findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

D.7.10 Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubber controlling this facility. Confirmed defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.

D.7.11 Scrubber Failure Detection

In the event that a scrubber's failure has been observed:

- (a) The affected unit will be shut down immediately until the failed unit has been replaced.

- (b) Based upon the confirmed findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

D.7.12 Demister Inspections

An inspection shall be performed each calendar quarter of the demister controlling the Sulfonation Process. Confirmed defective part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of demister part(s) replaced.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.13 Record Keeping Requirements

- (a) To document compliance with Condition D.7.6, the Permittee shall maintain daily records of visible emission notations of the stack exhaust.
- (b) To document compliance with Condition D.7.7, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure;
 - (B) Air to water ratio; and
 - (C) Flow rate.
- (c) To document compliance with Conditions D.7.8 and D.7.10, the Permittee shall maintain records of the results of inspections.
- (d) Pursuant to Operating Permit No. 01688 and to document compliance with Condition D.7.12, the Permittee shall maintain records of the following:
 - (1) All regular and emergency maintenance work performed on the demister;
 - (2) Inspections of the different components of this unit;
 - (3) Weekly activation of the spray nozzles for cleaning of the mesh pad; and
 - (4) Annual inspections of the interior parts of the demister.
- (e) Pursuant to Operating Permit No. 01688, the Permittee shall record and maintain a log of Sulfonation Process Cold Shutdown(s)/Start-Up(s) as follows:
 - (1) The Permittee shall notify HDEM at least one week prior to a cold shutdown (total plant shutdown for planned maintenance) of the Sulfonation Process. The notification shall include the anticipated date and time of start-up after the said cold shutdown.
 - (2) The Permittee shall notify HDEM at least 24-hours prior to starting up after a cold shutdown.
 - (3) The Permittee shall record and maintain a log of Sulfonation Process operating status including the date and times.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.8

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Preservative Addition System, identified as Unit 50, constructed in 1997, and controlled by primary and secondary filters, in which preservative powder is vacuum transferred at a maximum rate of 2,000 pounds per hour to a vacuum receiver atop a mixing tank. The preservative is mixed with perfume for subsequent addition to the soap process.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Particulate Matter (PM) Limit [Hammond Ordinance No. 3522]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), PM emissions from the Preservative Addition System shall not exceed 0.020 pounds per hour or 0.088 tons per year.

These local limits are not state or federally enforceable. They are only enforceable by HDEM.

D.8.2 Particulate Matter (PM10) Limit [Hammond Ordinance No. 3522]

Pursuant to Hammond Air Quality Control Ordinance No. 3522 (as amended), PM10 emissions from the Preservative Addition System shall not exceed 0.017 pounds per hour or 0.0745 tons per year.

These local limits are not state or federally enforceable. They are only enforceable by HDEM.

D.8.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

SECTION D.9

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Insignificant Activities:

- a) Two (2) laboratories.
- b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.
- c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- d) The following VOC and HAP storage containers:
 - A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons. (Building 14 dye mixing tanks)
 - B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- e) Production related activities, including application of oils, greases, lubricants, and nonvolatile materials as temporary protective coatings; degreasing operations that do not exceed 145 gallons per 12 months; brazing, cutting torches, soldering and welding; and closed loop heating and cooling systems.
- f) Cleaners and solvents characterized as follows:
 - A) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;
 - B) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- g) Noncontact cooling tower system with either of the following:
Natural draft cooling towers not regulated under a NESHAP.
Forced and induced draft cooling tower system not regulated under a NESHAP.
- h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- i) Heat exchanger cleaning and repair.
- j) Paved and unpaved roads and parking lots with public access.
- k) Asbestos abatement projects regulated by 326 IAC 14-10.
- l) Routine maintenance and repair of buildings.
- m) Flue gas conditioning systems and associated chemicals.
- n) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup.

- o) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- p) On-site fire and emergency response training approved by the department.
- q) Emergency generators as follows:
Gasoline generators not exceeding 110 horsepower.
Diesel generators not exceeding 1600 horsepower.
Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
- r) Other emergency equipment as follows:
Stationary, diesel fire pumps and rental air compressor.
- s) Coalescer media changeout.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations after January 1, 1980, performing organic solvent degreasing operations located anywhere in the state, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.9.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs existing as of January 1, 1980, located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph counties shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

- (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight (38) degrees Celsius (one hundred (100) degrees Fahrenheit);
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight (38) degrees Celsius (one hundred (100) degrees Fahrenheit), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight (38) degrees Celsius (one hundred (100) degrees Fahrenheit), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility without remote solvent reservoirs existing as of January 1, 1980, located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph counties shall ensure that the following requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.9.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaning Degreasers) users, providers, and manufacturers of solvents for use in cold cleaning degreasers in Clark, Floyd, Lake, and Porter Counties, except for solvents intended to be used to clean electronic components, shall ensure that the following requirements are met:

- (a) Material requirements are phased in as follows:
 - (1) On and after May 1, 2001, no person shall do the following:
 - (A) Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (b) On and after November 1, 1999, the following record keeping requirements shall be followed:
 - (1) All persons subject to the requirements of subsection (a)(1)(A) shall maintain each of the following records for each purchase:
 - (A) The name and address of the solvent supplier.
 - (B) The date of purchase.
 - (C) The type of solvent.
 - (D) The volume of each unit of solvent.
 - (E) The total volume of the solvent.
 - (F) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).
- (c) All records required by subsection (b) shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: **Conopco, Inc. d/b/a Unilever HPC USA**
Source Address: 1200 Calumet Avenue, Hammond, Indiana 46320
Mailing Address: 1200 Calumet Avenue, Hammond, Indiana 46320
Part 70 Permit No.: **T089-6623-00229**

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- ☐ Annual Compliance Certification Letter
- ☐ Test Result (specify) _____
- ☐ Report (specify) _____
- ☐ Notification (specify) _____
- ☐ Affidavit (specify) _____
- ☐ Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: _____

Printed Name: _____

Title/Position: _____

Phone: _____

Date: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

**5925 Calumet Avenue, Room 304
Hammond, Indiana 46320
Phone: 219-853-6306
Fax: 219-853-6343**

PART 70 OPERATING PERMIT

EMERGENCY OCCURRENCE REPORT

Source Name: **Conopco, Inc. d/b/a Unilever HPC USA**
Source Address: 1200 Calumet Avenue, Hammond, Indiana 46320
Mailing Address: 1200 Calumet Avenue, Hammond, Indiana 46320
Part 70 Permit No.: **T089-6623-00229**

This form consists of 2 pages

Page 1 of 2

This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice by mail or facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**PART 70 OPERATING PERMIT
QUARTERLY NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: **Conopco, Inc. d/b/a Unilever HPC USA**
Source Address: 1200 Calumet Avenue, Hammond, Indiana 46320
Mailing Address: 1200 Calumet Avenue, Hammond, Indiana 46320
Part 70 Permit No.: **T089-6623-00229**

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

- ☐ **Natural Gas Only**
- ☐ **Alternate Fuel Burned**
From: _____ **To:** _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: _____

Printed Name: _____

Title/Position: _____

Phone: _____

Date: _____

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Part 70 Quarterly Report**

Source Name: **Conopco, Inc. d/b/a Unilever HPC USA**
Source Address: 1200 Calumet Avenue, Hammond, Indiana 46320
Mailing Address: 1200 Calumet Avenue, Hammond, Indiana 46320
Part 70 Permit No.: T089-6623-00229
Facility: Powerhouse Boiler #1
Parameter: Fuel Oil #2 Usage
Limit: Synthetic Minor Limitation of Fuel Oil #2 Usage for NOx emissions.
Total fuel oil usage shall not exceed 600,000 gallons per twelve (12) consecutive month period, rolled on a monthly basis. This limitation is equivalent to a potential to emit twenty-five (25) tons of NOx per year when natural gas is used for the remainder of the year.

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

— No deviation occurred in this quarter.

— Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION and COMPLIANCE MONITORING REPORT**

Source Name: **Conopco, Inc. d/b/a Unilever HPC USA**
Source Address: 1200 Calumet Avenue, Hammond, Indiana 46320
Mailing Address: 1200 Calumet Avenue, Hammond, Indiana 46320
Part 70 Permit No.: **T089-6623-00229**

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Permit Requirement (Specify permit condition #)

Date of Deviation: _____ **Duration of Deviation:** _____

Number of Deviations: _____

Probable Cause of Deviation: _____

Response Steps Taken: _____

Permit Requirement (Specify permit condition #)

Date of Deviation: _____ **Duration of Deviation:** _____

Number of Deviations: _____

Probable Cause of Deviation: _____

Response Steps Taken: _____

Permit Requirement (Specify permit condition #)

Date of Deviation: _____ **Duration of Deviation:** _____

Number of Deviations: _____

Probable Cause of Deviation: _____

Response Steps Taken: _____

Page 2 of 2

Permit Requirement (Specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (Specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

**Indiana Department of Environmental Management
Office of Air Quality**

and

Hammond Department of Environmental Management

Addendum to the
Technical Support Document for a Part 70 Operating Permit

Source Name: **Conopco, Inc. d/b/a Unilever HPC USA ("Unilever HPC")**
Source Location: 1200 Calumet Avenue, Hammond, Indiana 46320
County: Lake
SIC Code: 2841 – Soap & Other Detergents
Operation Permit No.: **T089-6623-00229**
Permit Reviewer: Debra Malone, HDEM

On July 14, 2001, the Hammond Department of Environmental Management (HDEM) had a notice published in the Times, Hammond, Indiana, stating that Unilever HPC had applied for a Part 70 Operating Permit to operate a stationary soap manufacturing plant. The notice also stated that HDEM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On August 10, 2001, Unilever HPC submitted comments pursuant to the public notice. Upon further review, the HDEM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted) based on comments received. The Table Of Contents has been modified to reflect these changes.

Technical Support Document (TSD)

Comment 1: On pages 1, 10, 13, 16, 19 and 20, change "American Hydrotherm Boiler" to "American Hydrotherm Heater". "Heater" is the correct terminology for this equipment. Boiler is a misnomer since boiling does not take place within this equipment.

Response to Comment 1:

The change in terminology from "American Hydrotherm Boiler" to "American Hydrotherm Heater" has not been made due to the fact that indirect heating does occur and the unit is referred to in 326 IAC 6-1-10.1(d) as a boiler.

Comment 2: On page 3, under Permitted Emission Units and Pollution Control Equipment, 3) (m) and (o) unit descriptions should be revised and the maximum design rate should be 18,000 pounds per hour, not 4,000 pounds per hour.

Response to Comment 2:

Unit descriptions have been revised along with the maximum design rate in order to correct information that was stated incorrectly. The corrections made are as follows:

- m) Zinc Oxide Catalyst Weight Station and three ~~Apron Conveyors drives~~ **Chill Rolls** (Lines 1, 2, & 3), identified as Unit 25, constructed in 1985, controlled by a dust collection

system (DC-3), with a maximum design rate of soap to be processed of ~~4,000~~ **18,000** pounds per hour and exhausting to Stack 27.

- o) Three (3) Chill Rolls ~~and Apron Conveyors~~ **and Screw Conveyors** (Lines 1, 2, & 3), identified as Unit 27, constructed in 1985, controlled by a dust collection system (DC-2), with a maximum capacity of 18,000 pounds per hour and exhausting to Stack 29.

On page 10 the following process/facility description has been revised as follows:

Three Chill Rolls & Apron Conveyors and Screw Conveyors	1.226	0.8585					
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On page 14, in the first table, emission unit descriptions have been revised as follows:

Emission Unit Description	Emission Unit ID #	Emission Limit (gr/dscf)	Emission Limit (lbs/hr)
Soap Rework Grinding Process	11	0.020	0.250
Three (3) Vacuum System Soap Dryers	12	0.020	0.120
Five (5) Noodles Bins and One (1) Scrap Soap Kettle	13	0.020	0.860
Hard Soaps Finishing Lines No. 1, 2 and 3	14	0.020*	1.540*
Hard Soaps Finishing Lines No. 5, 7, and 8	15	0.020*	1.540*
Soap Noodle Bin No. 1 Dust Collection System	18	0.020	0.210
Soap Noodle Bin No. 2 Dust Collection System	19	0.020	0.210
Soap Noodle Bin No. 3 Dust Collection System	20	0.020	0.210
Chip Mixer No. 1	21	0.020**	0.720**
Chip Mixer No. 2	22	0.020**	0.720**
Chip Mixer No. 3 and 4	23	0.020**	0.720**
Powder Dye Mixing System	24	0.020	0.130
Zinc Oxide Catalyst Weight Station and Three Apron Conveyors Drives Chill Rolls	25	0.020	0.800
Detergent Bar Soap Facility Milling and Pelletizing	26	0.020	1.03
Three (3) Chill Rolls and Apron Conveyors and Screw Conveyors	27	0.020	1.090

Also on page 20 process/facility descriptions have been revised as follows:

Three Chill Rolls & Apron Conveyors and Screw Conveyors	0.1960	1.09
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Comment 3: On page 5, under Permitted Emission Units and Pollution Control Equipment 7), the Sulfonation Process description needs to be revised to correct an error.

Response to Comment 3:

The Sulfonation Process description has been revised in order to correct information that was stated incorrectly. The correction is as follows:

- 7) Sulfonation Process, including a sulfur burner, SO₂ heat exchanger, catalytic gas converter, ~~a second SO₂~~ **an SO₃** heat exchanger, reactor, sulfuric acid scrubber, electrostatic precipitator, caustic scrubbing tower and a demister, identified as Unit 4, constructed in 1967, with a maximum production rate of alkyl benzene sulfonic acid of 6,500 pounds per hour and exhausting to Stack 4.

Comment 4: Storage Tank No. 26 and Storage Tank No. 28 have been decommissioned and removed. On page 5, delete paragraphs 6) a) and 6) b). On page 10, delete lines associated with Storage Tank No. 26 and Storage Tank No. 28. On page 12, in paragraphs (c), (d) and (e) delete information dealing with Storage Tank No. 26 and Storage Tank No. 28. On page 18, the paragraph containing "three (3) above ground storage tanks are..." should read "one (1) above ground storage tank is..."

Response to Comment 4:

All information relating to Storage Tank No. 26 and Storage Tank No. 28 has been eliminated since Storage Tank No. 26 and Storage Tank No. 28 have been decommissioned and removed. The changes made are as follows:

(page 5):

- 6) Storage Tanks, identified as follows:
- a) ~~Storage Tank No. 26, identified as Unit 62, constructed in 1930, with a maximum design capacity of 141,400 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.~~
 - b) ~~Storage Tank No. 28, identified as Unit 63, constructed in 1930, with a maximum design capacity of 141,400 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.~~
 - e) Fuel Oil Day Tank, identified as Unit ~~64~~**62**, constructed in 2001, with a maximum design capacity of 18,000 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.

(page 10):

Storage Tank No. 26				0.000409			
Storage Tank No. 28				0.000409			

(page 12):

- (c) The ~~Storage Tanks No. 26, 28, & the Fuel Oil Day Tank (Units 62, 63, & 64)~~ **are is** not subject to 40 CFR Part 60 Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for which construction, reconstruction or modification commenced after June 11, 1973, and prior to May 19, 1978, because ~~Units 62 & 63 were constructed in 1930~~, Unit ~~64~~**62** was constructed in 2001, and ~~none have~~ **has not** been reconstructed or modified.
- (d) The ~~Storage Tanks No. 26, 28, & the Fuel Oil Day Tank (Units 62, 63, & 64)~~ **are is** not subject to 40 CFR Part 60 Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for which construction, reconstruction, or modification commenced after May 18, 1978 and prior to July 23, 1984, because ~~Units 62 & 63 were constructed in 1930~~, Unit ~~64~~**62** was constructed in 2001, and ~~none have~~ **has not** been reconstructed or modified.
- (e) The ~~Storage Tanks No. 26, 28, & the Fuel Oil Day Tank (Units 62, 63, & 64)~~ **are is** not subject to 40 CFR Part 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage

Vessels for which construction, reconstruction, or modification commenced after July 23, 1984, because ~~Units 62 & 63 were constructed in 1930 and have not been reconstructed or modified.~~ Unit ~~64~~**62** was constructed in 2001, but has a design capacity less than 75 m³ (19,800 gallons) and is therefore exempt from the General Provisions (part 60, subpart A) and from the provisions of this subpart.

(page 18):

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

The ~~three (3)~~ **one (1)** above ground storage tanks ~~are~~ **is** only subject to the record keeping requirements of 327 IAC 8-9-6(a) and (b) because ~~each of their~~ **the** vapor pressures ~~are~~ **is** less than 0.5 psia. Pursuant to 326 IAC 8-9-6, the Permittee shall keep the following records for the life of the vessel:

- a. The vessel identification number.
- b. The vessel dimensions.
- c. The vessel capacity.

Comment 5: Changes to totals in the following tables -- Uncontrolled Potential to Emit, Potential to Emit After Controls, Actual Emissions, and Potential to Emit After Issuance need to be made due to the following:

- a) Storage Tank No. 26 and Storage Tank No. 28 have been decommissioned and removed.
- b) American Hydrotherm Boiler #1 and American Hydrotherm Boiler #2: the CO natural gas emission factor was changed from 20 lbs/mmcf to 84 lbs/mmcf.
- c) The maximum design rate for the Catalyst Weigh Station was incorrectly stated. It was changed from 2 tons per hour to 9 tons per hour.
- d) American Hydrotherm Boiler #2: the emission factors were revised from residual fuel oil factors to distillate fuel oil factors.

The emission factors were revised as follows:

PM: 12 lbs/mgal to 2 lbs/mgal
PM10: 10.3 lbs/mgal to 1 lb/mgal
SO_x: 158 lbs/mgal to 71 lbs/mgal
NO_x: 55 lbs/mgal to 20 lbs/mgal
VOC: 0.28 lbs/mgal to 0.2 lb/mgal

Response to Comment 5:

Modifications to each table have been made to reflect the changes mentioned above.

On page 9, under Potential to Emit, the Uncontrolled Potential to Emit and Potential to Emit After Controls tables have been modified as follows:

Uncontrolled Potential to Emit

Pollutant	Potential To Emit (tons/year)
PM	15,913.99 15,910.42
PM-10	11,168.42 11,165.10
SO ₂	824.74 823.32
VOC	8.30
CO	62.09 65.35
NO _x	344.38 301.89

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Potential to Emit After Controls

Pollutant	Potential To Emit (tons/year)
PM	101.20 97.63
PM-10	85.50 82.19
SO ₂	774.07 772.64
VOC	8.30
CO	62.09 65.35
NO _x	314.38 301.89

On page 9, under Actual Emissions, the emissions table has been modified as follows:

Pollutant	Actual Emissions (tons/year)
PM	42.77 12.60
PM-10	9.90 9.78
SO ₂	55.01
VOC	2.44
CO	25.97 28.65
NO _x	44.28
HAP (specify)	0

On page 10, under Potential to Emit After Issuance, the table has been modified as follows:

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Babcock-Wilcox Boiler #3	38.704	33.2856*	377.75	1.8905	12.03	132.33	
Babcock-Wilcox Boiler #4	38.704	*	377.75	1.8905	12.03	132.33	
American Hydrotherm Heater #1	0.1529	0.1529	0.0306	0.2702	1.02 4.28	5.10	
American Hydrotherm Heater #2	4.2819 0.7136	3.6753 0.3568	14.09 12.67	0.2702	1.78	19.63 7.14	
Powerhouse Boiler #1	5.644	5.644	4.432	3.982	35.226	24.989	
Soap Rework Grinding Process	0.8199	0.5740					
Three Soap Dryers	0.2628	0.0184					
Five Noodle Bins & One Scrap Kettle	1.879	1.3153					
Hard Soaps Finishing Lines 1, 2, and 3	1.237	0.8661					
Hard Soaps Finishing Lines 5, 7 and 8	1.237	0.8661					
Soap Noodle Bin No. 1 DC System	0.451	0.3158					
Soap Noodle Bin No. 2 DC System	0.451	0.3158					
Soap Noodle Bin No. 3 DC System	0.451	0.3158					
Chip Mixer No. 1	0.451	0.3158					
Chip Mixer No. 2	0.451	**					
Chip Mixer Nos. 3 & 4	0.451	**					
Powder Dye Mixing System	0.0044	0.0031					
ZnO Catalyst Weigh Station	0.092	0.0644					
Detergent Bar Soap Milling & Pelletizing	3.451	2.4160					
Three Chill Rolls & Apron Conveyors	1.226	0.8585					
Flex Kleen DC System-1053	0.026	0.0184					
Flex Kleen DC System-1054	0.026	0.0184					
Flex Kleen DC System-1055	0.026	0.0184					
Flex Kleen DC System-1056	0.026	0.0184					
Flex Kleen DC System-1052	0.035	0.0245					
Flex Kleen DC System-1051	0.031	0.0219					
Sample Detergent Bar Soap Line	0.009	0.006					
No. 1 & No. 2 Noodle Bins	0.026	0.0184					
Unit 17 controlled by Schneible Wet Scrubber System	0.1106	0.0766					
Unit 30 controlled by Schneible Wet Scrubber System	0.3321	0.2325					
Soap Dryer/Cleanout System Tank No. 1	0.011	0.0110					
Soap Dryer/Cleanout System Tank No. 2	0.038	0.0377					
Storage Tank No. 26				0.000409			
Storage Tank No. 28				0.000409			
Fuel Oil Day Tank				0.000113			
Sulfonation Process	0.0101	0.0071	0.0051				
Preservative Addition System	0.0876	0.0745					
Total Emissions	404.20 97.63	85.50 82.19	774.06 772.64	8.30	62.09 65.35	344.38 301.89	0.0

*Combined limit for Boilers 3 & 4

** Combined limit for Chip Mixer Nos. 1, 2, 3 & 4

Comment 6: On page 18, under Local Rule Applicability – Individual Facilities, the PM emission limits for the Powerhouse Boiler No. 1 need to be modified to incorporate the 40 CFR Part 60, Subpart Db emission standards.

Response to Comment 6:

The PM emission limits for the Powerhouse Boiler No. 1 have been modified to incorporate the 40 CFR Part 60, Subpart Db emission standards; emissions shall not exceed five-hundredths (0.05) pound PM per million Btu (MMBtu) heat input. The changes are as follows:

Local Rule Applicability - Individual Facilities

Hammond Air Quality Control Ordinance No. 3522 (as amended)

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the PM emissions from the following emission units shall not exceed the pounds per hour emission rates listed below:

Emission Unit Description	Emission Unit ID #	PM Emission Limit (lbs/hr)	PM Emission Limit (tons/year)
ZnO Catalyst Weigh Station	25	0.021	0.092
Detergent Bar Soap Facility Milling and Pelletizing	26	0.79	3.45
No. 1 & No. 2 Noodle Bins	48	0.006	0.0263
Powerhouse Boiler No. 1	49	5.521 6.000	6.2968 26.2800
Preservative Addition System	50	0.020	0.088

Comment 7: On page 19, under Local Rule Applicability – Individual Facilities, the PM10 emission limits for the Powerhouse Boiler No. 1 need to be corrected.

Response to Comment 7:

The PM10 emission limits for the Powerhouse Boiler No. 1 have been modified to reflect what is stated in Appendix A emission calculations. What was stated previously was an error. The changes are as follows:

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the PM10 emissions from the following emission units shall not exceed the pounds per hour emission rates listed below:

Emission Unit Description	Emission Unit ID #	PM ₁₀ Emission Limit (lbs/hr)	PM ₁₀ Emission Limit (tons/year)
No. 1 & No. 2 Noodle Bins	48	0.0042	0.0184
Powerhouse Boiler No. 1	49	5.521 6.0000	6.2968 5.6441
Preservative Addition System	50	0.017	0.0745

Comment 8: On page 19, the sulfur content of No. 2 fuel oil (which is the back-up fuel for American Hydrotherm Heater #2 and Powerhouse Boiler No. 1) should be “0.5% maximum sulfur content by weight”. This is the sulfur content of commercially available No. 2 fuel oil for combustion and the maximum allowed by Indiana Rule 326 IAC 7-1.1-2. The sulfur contents designated (0.25% and 0.096%) are odd and their basis is not apparent.

Response to Comment 8:

The sulfur contents have been modified to 0.5% maximum sulfur content by weight to reflect that of commercially available No. 2 fuel oil for combustion and the maximum allowed by Indiana Rule 326 IAC 7-1.1-2. The changes made are as follows:

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the maximum sulfur content by weight of the fuel oil burned in the boilers shall be limited as follows:

Emission Unit Description	Emission Unit ID #	Maximum Sulfur Content by Weight
Babcock-Wilcox Boiler #3	2	1.43%
Babcock-Wilcox Boiler #4	3	1.43%
American Hydrotherm Heater #2	29	0.25 0.5%
Powerhouse Boiler No. 1	49	0.096 0.5%

Comment 9: On page 20, under Testing Requirements, the PM10 calculated emissions for American Hydrotherm #2 needs to be modified due to the change in PM10 emission factor.

Response to Comment 9:

The PM10 calculated emissions for the American Hydrotherm #2 has been modified due to the change in PM10 emission factor. The PM10 emission factor was revised from the residual fuel oil factor to the distillate fuel oil factor (PM10: 10.3 lbs/mgal to 1 lb/mgal). The change in PM10 calculated emissions is as follows:

Process/facility	PM-10 calculated (lb/hour)	PM-10 regulatory limit (lb/hour)
Babcock-Wilcox Boiler #3	7.5995	18.88*
Babcock-Wilcox Boiler #4	7.5995	*
American Hydrotherm Heater #1	0.0349	0.040
American Hydrotherm Heater #2	0.8394 0.0815	1.830

Comment 10: On page 21, paragraph 1 under 1. Visible Emission Notations, the frequency of visible emission notations of the stack exhausts from these facilities should be “weekly” instead of “daily”. A “weekly” notation frequency is sufficient. The subject air pollution control equipment is modern and reliable, and other operational checks and monitoring make a “daily” notation unnecessary.

Response to Comment 10:

Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. The suggested wording would allow sporadic use of compliance monitoring, which would not accomplish the purpose of compliance monitoring. Baghouse failure can occur suddenly; therefore monitoring of baghouse operational parameters should be more frequently than weekly in such cases where a source operates more than one shift per day. The agencies believe that a visible emission notation once per day is a reasonable requirement. Therefore, the requirements to perform visible emissions notations from “daily” to “weekly” have not been changed.

Comment 11: On page 21, paragraph 2 under 1. Visible Emission Notations, the frequency of visible emission notations of the stack exhausts from these facilities should be “daily” instead of

“once per shift”. A “daily” notation frequency is adequate. Modern combustion controls and other operational checks make an “every shift” notation unnecessary and burdensome.

Response to Comment 11:

Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. The suggested wording would allow sporadic use of compliance monitoring, which would not accomplish the purpose of compliance monitoring. Baghouse failure can occur suddenly; therefore monitoring of baghouse operational parameters should be more frequently than daily in such cases where a source operates more than one shift per day. The agencies believe that a visible emission notation once per shift is a reasonable requirement. Therefore, the requirements to perform visible emissions notations from “once per shift” to “daily” have not been changed.

Comment 12: On page 22, first paragraph under 2. Parametric Monitoring, the differential pressure range of “1.0 to 5.0 inches of water” should be widened to “1.0 to 8.0 inches of water”. For Unilever’s dust collectors, a high differential pressure indicates that a dust collector is probably becoming blinded or plugged, which is an operational problem, not an emissions problem. Emissions do not occur due to blinding or plugging (for Unilever’s dust collectors), and hence high differential pressures are not environmentally detrimental. The suggested differential pressure range (1.0 – 8.0) allows for proper dust collector operation without dust emissions, or any other environmental concerns. Also, it should be noted that dust collectors that have been recently fitted with new bags will normally operate in the 0.0 – 1.0 inches of water range until the bags build up a “pre-coat”. Also add “or as recommended by the equipment manufacturer” to line 6 of this paragraph.

Response to Comment 12:

2. Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the Emission Units 11, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 31, 32, 33, 34, 35, 36, 45, and 48 at least once weekly when the equipment is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and ~~5.0~~ **8.0** inches of water, ~~or a range established during the latest stack test~~ **or as recommended by the equipment manufacturer**. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above-mentioned range for any one reading.

Comment 13: On page 22, second paragraph under 2. Parametric Monitoring, the frequency “daily” should be “weekly”. The differential pressure range “1.0 to 5.0 inches of water” should be “5.0 to 10.0 inches of water”. This frequency of observation and pressure range is adequate to allow for proper scrubber operation without emissions. Also, add “or as recommended by the equipment manufacturer” to line 5 and change Line 6: “amperage” should read “pressure”.

Response to Comment 13:

Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. The pressure drop monitoring is used to indicate compliance with 326 IAC 6. This requirement is designed as a trigger that the source perform some corrective action on the facility if the pressure drop is abnormal, to ensure continuous compliance with emission limitations. The agencies do not believe that a weekly monitoring frequency is adequate to indicate compliance with 326 IAC 6. Therefore, the requirements to record the flow rate and total static pressure drop across each scrubber from “weekly” to “daily” have not been changed. The differential pressure range has been modified as requested along with changes to lines 5 and 6.

The Permittee shall record the flow rate and total static pressure drop across each scrubber used in conjunction with Units 4, 17, and 30 at least once daily when in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the scrubbers shall be maintained within the range of 4.0 and 5.0 and 10.0 inches of water, or a range established during the latest stack test or as recommended by the equipment manufacturer. The Compliance Response Plan for these units shall contain troubleshooting and response steps for when the amperage pressure is outside of the normal range as recommended by the manufacturer.

Comment 14: On page 22, under 3. Baghouse Inspections, an inspection of all bags should be performed “annually”. An annual baghouse inspection frequency has proven adequate to assure proper emission-free operation. The plant operates 24 hours per day – 7 days per week. Comprehensive maintenance takes place annually, during which all units are thoroughly inspected and preventative maintenance performed, including bag change-out. Additional maintenance is performed as needed.

Response to Comment 14:

The agencies do not believe that an annual baghouse inspection frequency is adequate to indicate compliance with 326 IAC 6. Therefore, the requirements to perform quarterly baghouse inspections have not been changed.

Comment 15: On page 22, under 4. Broken or Failed Bag Detection, paragraph (a), Line 5 wording should read as follows: “within twenty-four (24) hours of discovery...”. Twenty-four hours allows adequate time to devise a proper response.

Response to Comment 15:

The agencies believe that the eight (8) hour timeframe as stated within 4. Broken or Failed Bag Detection allows adequate time to devise a proper response. The requirements under Broken or Failed Bag Detection will remain unchanged.

Comment 16: On page 22, under 5. Scrubber Inspections, an inspection of the scrubbers should be performed “annually”. An annual scrubber inspection frequency has proven adequate to assure proper emission-free operation. The plant operates 24 hours per day – 7 days per week. Comprehensive maintenance takes place annually, during which all scrubber units are thoroughly inspected and preventative maintenance performed. Additional maintenance is performed as needed.

Response to Comment 16:

The agencies do not believe that an annual scrubber inspection frequency is adequate to indicate compliance with 326 IAC 6. Therefore, the requirements to perform quarterly scrubber inspections have not been changed.

Comment 17: On page 23, under 6. Demister Inspections, an inspection of the demister should be performed “annually”. An annual demister inspection frequency has proven adequate to assure proper emission-free operation. The plant operates 24 hours per day – 7 days per week. Comprehensive maintenance takes place annually, during which the demister units are thoroughly inspected and preventative maintenance performed. Additional maintenance is performed as needed. Also, the word “scrubber” in the last line should be “demister”.

Response to Comment 17:

The agencies do not believe that an annual demister inspection frequency is adequate to indicate compliance with 326 IAC 6. Therefore, the requirements to perform quarterly demister inspections have not been changed. However, the word “scrubber” in the last line was changed to “demister”.

6. Demister Inspections

An inspection shall be performed each calendar quarter of the demister controlling the Sulfonation Process. Defective part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of ~~scrubber~~ **demister** part(s) replaced.

Part 70 Operating Permit

Comment 1: On pages 7, 38 and 39, change “American Hydrotherm Boiler” to “American Hydrotherm Heater”. “Heater” is the correct terminology for the naming of this equipment. Boiler is a misnomer since boiling does not take place within this equipment.

Response to Comment 1:

The change in terminology from “American Hydrotherm Boiler” to “American Hydrotherm Heater” has not been made due to the fact that indirect heating does occur and the unit is referred to in 326 IAC 6-1-10.1(d) as a boiler.

Comment 2: On page 9, under Emission Units and Pollution Control Equipment Summary, 3) (m) and (o) unit descriptions should be revised and the maximum design rate should be 18,000 pounds per hour, not 4,000 pounds per hour. This change also needs to be made on page 47 within the Description box for Section D.3, m) and o) and on page 49, under Condition D.3.3 Particulate Matter less than 10 microns (PM10) Lake County Rule [326 IAC 6-1-10.1(d)].

Response to Comment 2:

Unit descriptions have been revised along with the maximum design rate in order to correct information that was stated incorrectly. The corrections made are as follows:

(pages 9 & 47)

m) Zinc Oxide Catalyst Weight Station and three ~~Apron Conveyors drives~~ **Chill Rolls** (Lines 1, 2, & 3), identified as Unit 25, constructed in 1985, controlled by a dust collection system (DC-3), with a maximum design rate of soap to be processed of ~~4,000~~ **18,000** pounds per hour and exhausting to Stack 27.

o) Three (3) Chill Rolls ~~and Apron Conveyors~~ **and Screw Conveyors** (Lines 1, 2, & 3), identified as Unit 27, constructed in 1985, controlled by a dust collection system (DC-2), with a maximum capacity of 18,000 pounds per hour and exhausting to Stack 29.

(page 49)

Emission Unit Description	Emission Unit ID #	PM ₁₀ Emission Limit (gr/dscf)	PM ₁₀ Emission Limit (lbs/hr)
Soap Rework Grinding Process	11	0.020	0.250
Three (3) Vacuum System Soap Dryers	12	0.020	0.120
Five (5) Noodles Bins and One (1) Scrap Soap Kettle	13	0.020	0.860
Hard Soaps Finishing Lines No. 1, 2 and 3	14	0.020*	1.540*
Hard Soaps Finishing Lines No. 5, 7, and 8	15	0.020*	1.540*
Soap Noodle Bin No. 1 Dust Collection System	18	0.020	0.210
Soap Noodle Bin No. 2 Dust Collection System	19	0.020	0.210
Soap Noodle Bin No. 3 Dust Collection System	20	0.020	0.210
Chip Mixer No. 1	21	0.020**	0.720**
Chip Mixer No. 2	22	0.020**	0.720**
Chip Mixer No. 3 and 4	23	0.020**	0.720**
Powder Dye Mixing System	24	0.020	0.130
Zinc Oxide Catalyst Weight Station and Three Apron Conveyors Drives Chill Rolls	25	0.020	0.800
Detergent Bar Soap Facility Milling and Pelletizing	26	0.020	1.03
Three (3) Chill Rolls and Apron Conveyors and Screw Conveyors	27	0.020	1.090

Comment 3: On page 10, under A.2 Emission Units and Pollution Control Equipment Summary, paragraph 4) a), “Drays” – spelled wrong. “Drais” – correct.

Response to Comment 3:

The word “Drays” was changed to “Drais” in order to correct the spelling error.

4) Manufacturing Processes controlled by wet scrubber systems:

- a) Seven (7) liquid “Drais” mixers, two (2) reactors, and two (2) strippers (for Lines 4 through 7), identified as Unit 30, constructed in 1990, controlled by a Schneible wet scrubber and demister collection system. In case of a rupture disk failure, emissions from knockout tanks H-30675 and H-30676 will also be controlled by this system. This system also includes Line 4 melt tank and hold tank, and Lines 5, 6, and 7 melt tanks. In addition, the three (3) Holding Tanks and Melt Tanks from Lines 1, 2, & 3 are tied into this system for housekeeping purposes. The scrubber-demister system has a maximum capacity of 1,743 pounds per hour of material handled and exhausts to Stack 2A.

Comment 4: On page 11, 7) Sulfonation Process and on page 58, Section D.7 Sulfonation Process description box, the Sulfonation Process description needs to be revised to correct an error.

Response to Comment 4:

The Sulfonation Process description has been revised in order to correct information that was stated incorrectly. The correction is as follows:

- 7) Sulfonation Process, including a sulfur burner, SO₂ heat exchanger, catalytic gas converter, a second SO₂ and SO₃ heat exchanger, reactor, sulfuric acid scrubber, electrostatic precipitator, caustic scrubbing tower and a demister, identified as Unit 4, constructed in 1967, with a maximum production rate of alkyl benzene sulfonic acid of 6,500 pounds per hour and exhausting to Stack 4.

Comment 5: On pages 11 and 57, delete paragraphs 6) a) & 6) b). Storage Tank No. 26 and Storage Tank No. 28 have been decommissioned and removed.

Response to Comment 5:

All information relating to Storage Tank No. 26 and Storage Tank No. 28 has been eliminated since Storage Tank No. 26 and Storage Tank No. 28 have been decommissioned and removed. The changes made are as follows:

- 6) Storage Tanks, identified as follows:
- a) ~~Storage Tank No. 26, identified as Unit 62, constructed in 1930, with a maximum design capacity of 141,400 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.~~
 - b) ~~Storage Tank No. 28, identified as Unit 63, constructed in 1930, with a maximum design capacity of 141,400 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.~~
 - e) Fuel Oil Day Tank, identified as Unit ~~64~~**62**, constructed in 2001, with a maximum design capacity of 18,000 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.

On page 57, verb tense also needs to be modified as follows:

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOCs) [326 IAC 8-9]

Any change or modification to ~~these~~ **this** facilities ~~that~~ would increase potential volatile organic compound (VOC) emissions, as specified in 326 IAC 2-1, must be approved by the Office of Air Quality (OAQ) and HDEM before such change or modification can occur.

Compliance Determination Requirements

D.6.2 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee is not required to test ~~these~~ **this** facilities ~~by~~ this permit. However, IDEM or HDEM may require compliance testing at any specific time when necessary to determine if ~~these~~ **this** facilities ~~are~~ **is** in compliance.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.4 Record Keeping Requirements

Pursuant to 326 IAC 8-9-6(a) and (b), the Permittee shall keep the following records for life of the vessels:

- (a) The vessel identification number.
- (b) The vessel dimensions.
- (c) The vessel capacity.

Comment 6: On page 17, Condition B.11 (a) (1), insert "(position title)" after individual(s).

Response to Comment 6:

Position title has been added after individuals to eliminate an unnecessary amount of changes being made to the permit to change a specific person's name.

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s)/**position title** responsible for inspecting, maintaining, and repairing emission control devices;

Comment 7: On page 21, Condition B.15 (b), it is not clear whether exceedances of local limits (as identified in Section D) would be classified as permit deviations or not. Unilever requests that HDEM provide clarification in this condition that exceedances of local limits are not considered to be a deviation reportable under this condition of the Part 70 permit.

Response to Comment 7:

The agencies have decided not to revise Condition B.15 Deviations from Permit Requirements and Conditions for the following reasons:

Exceedances of local limits that are listed under the Emission Limitations and Standards section of the permit (as identified in the Section D's) could be considered a deviation and/or an emergency and therefore would need to be reported to the agencies. Only those deviations as listed in (b) would not need to be reported as a deviation.

Comment 8: On page 39, Condition D.1.5, change sulfur content to 0.5%.

Response to Comment 8:

The sulfur content has been modified to 0.5% maximum sulfur content by weight to reflect that of commercially available No. 2 fuel oil for combustion and the maximum allowed by Indiana Rule 326 IAC 7-1.1-2. The change made is as follows:

D.1.5 Sulfur Dioxide (SO₂) [Hammond Ordinance No. 3522]

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the sulfur content by weight of the fuel oil burned shall be limited as follows:

Emission Unit Description	Emission Unit ID #	Maximum Sulfur Content by Weight
Babcock-Wilcox Boiler #3	2	1.43%
Babcock-Wilcox Boiler #4	3	1.43%
American Hydrotherm Heater #2	29	0.25 0.5%

These local limits are not state or federally enforceable. They are only enforceable by HDEM.

Comment 9: On page 40, Condition D.1.9 (a), a “daily” frequency is a more practical stack observation frequency. Modern combustion controls and other operational checks make an “every shift” observation unnecessary.

Response to Comment 9:

Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. The suggested wording would allow sporadic use of compliance monitoring, which would not accomplish the purpose of compliance monitoring. Baghouse failure can occur suddenly; therefore monitoring of baghouse operational parameters should be more frequently than daily in such cases where a source operates more than one shift per day. The agencies believe that a visible emission notation once

per shift is a reasonable requirement. Therefore, the requirements to perform visible emissions notations from “once per shift” to “daily” have not been changed.

Comment 10: On page 42, Condition D.2.3, the end of this requirement should read “for this facility”, since there is only one piece of equipment covered under this section.

Response to Comment 10:

“These facilities” has been revised to “this facility” in order to correct information that was stated incorrectly. The corrections made are as follows:

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~these~~ **this** facilitiesy.

Comment 11: On page 50, Condition D.3.7 (a), the frequency of visible emission notations of the stack exhausts from these facilities should be “weekly” instead of “daily”. The subject air pollution control equipment is modern and reliable. Formalized and documented daily observations are unnecessary.

Response to Comment 11:

Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. The suggested wording would allow sporadic use of compliance monitoring, which would not accomplish the purpose of compliance monitoring. Baghouse failure can occur suddenly; therefore monitoring of baghouse operational parameters should be more frequently than weekly in such cases where a source operates more than one shift per day. The agencies believe that a visible emission notation once per day is a reasonable requirement. Therefore, the requirements to perform visible emissions notations from “daily” to “weekly” have not been changed.

Comment 12: On page 50, Condition D.3.8, the differential pressure range of “1.0 to 5.0 inches of water” should be widened to “1.0 to 8.0 inches of water”. For Unilever’s dust collectors, a high differential pressure indicates that a dust collector is probably becoming blinded or plugged, which is an operational problem, not an emissions problem. Emissions do not occur due to blinding or plugging (for Unilever’s dust collectors), and hence high differential pressures are not environmentally detrimental. The suggested differential pressure range (1.0 – 8.0) allows for proper dust collector without dust emissions, or any other environmental concerns. Also, it should be noted that dust collectors that have been recently fitted with new bags will normally operate in the 0.0 – 1.0 inches of water range until the bags build up a “pre-coat”. Also add “or as recommended by the equipment manufacturer” to line 5 of this paragraph.

Response to Comment 12:

D.3.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse used in conjunction with the manufacturing processes, at least once weekly when the processes are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each baghouse shall be maintained within the range of 1.0 and ~~5.0~~ **8.0** inches of water, ~~or~~ a range established during the latest stack test **or as recommended by the equipment manufacturer**. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above-mentioned range for any one reading.

Comment 13: On page 50, Condition D.3.9 Baghouse Inspections, change “each calendar quarter” to “annually”. The equipment is modern and reliable. An annual baghouse inspection frequency has proven adequate to assure proper emission-free operation. The plant operates 24 hours per day – 7 days per week. Comprehensive maintenance takes place annually, during which the equipment is thoroughly inspected and preventative maintenance performed.

Response to Comment 13:

The agencies do not believe that an annual baghouse inspection frequency is adequate to indicate compliance with 326 IAC 6. Therefore, the requirements to perform quarterly baghouse inspections have not been changed.

Comment 14: On page 60, under Condition D.7.11 Demister Inspections the word “scrubber” in the last line should be changed to “demister”

Response to Comment 14:

“Scrubber” was changed to “demister” in order to correct information that was stated incorrectly. The correction made is as follows:

D.7.11 Demister Inspections

An inspection shall be performed each calendar quarter of the demister controlling the Sulfonation Process. Confirmed defective part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of ~~scrubber~~ **demister** part(s) replaced.

Comment 15: The suggested changes indicated in numbers 11 through 13 above should also be applied similarly on pages 53, 56, 59 and 60 as appropriate.

Response to Comment 15:

Changes have been made accordingly.

Appendix A: Source Emission Calculations

Comment 1: Pages 7 and 13, CO Emission Factor for Natural Gas, change the CO natural gas emission factor to 84 pounds per million cubic feet of gas burned to agree with current AP-42 emission factors.

Response to Comment 1:

The CO natural gas emission factor was changed from 20 lbs/mmcf to 84 lbs/mmcf.

Comment 2: Page 7, change “American Hydrotherm Boiler” to “American Hydrotherm Heater”. “Heater” is the correct terminology for this equipment. Boiler is a misnomer since boiling does not take place within this equipment. This correction is required on page 13 as well.

Response to Comment 2:

The change in terminology from “American Hydrotherm Boiler” to “American Hydrotherm Heater” has not been made due to the fact that indirect heating does occur and the unit is referred to in 326 IAC 6-1-10.1(d) as a boiler.

Comment 3: Page 11, the maximum design rate for the Catalyst Weigh Station was incorrectly stated. It should be 9 tons per hour.

Response to Comment 3:

The maximum design rate has been revised in order to correct information that was stated incorrectly.

Comment 4: Page 13, Fuel Oil Combustion Emission Factors. These factors appear to be for residual fuel oil, not for distillate fuel oil (No. 2 Fuel Oil). The emission factors should be revised to reflect No. 2 Fuel Oil factors.

The emission factors were revised as follows:

PM: 12 lbs/mgal to 2 lbs/mgal
PM10: 10.3 lbs/mgal to 1 lb/mgal
SOx: 158 lbs/mgal to 71 lbs/mgal
NOx: 55 lbs/mgal to 20 lbs/mgal
VOC: 0.28 lbs/mgal to 0.2 lb/mgal

Response to Comment 4:

The emission factors were revised.

Comment 5: Sheets 1-6. Delete these sheets. Storage Tank No. 26 and Storage Tank No. 28 have been decommissioned and removed.

Response to Comment 5:

Sheets 1-6 have been deleted.

IDEM-NWO submitted the following comments on August 17, 2001:

Part 70 Operation Permit

Comment 1: On page 10, Condition A.2 (Emission Units and Pollution Control Equipment Summary) 4), a) the word "Drays" was misspelled. It should be "Drais".

Response to Comment 1:

The word "Drays" has been revised to the correct spelling "Drais".

4) Manufacturing Processes controlled by wet scrubber systems:

- a) Seven (7) liquid "Drais" mixers, two (2) reactors, and two (2) strippers (for Lines 4 through 7), identified as Unit 30, constructed in 1990, controlled by a Schneible wet scrubber and demister collection system. In case of a rupture disk failure, emissions from knockout tanks H-30675 and H-30676 will also be controlled by this system. This system also includes Line 4 melt tank and hold tank, and Lines 5, 6, and 7 melt tanks. In addition, the three (3) Holding Tanks and Melt Tanks from Lines 1, 2, & 3 are tied into this system for housekeeping purposes. The scrubber-demister system has a maximum capacity of 1,743 pounds per hour of material handled and exhausts to Stack 2A.

Comment 2: On page 15, Condition B.8 (Compliance with Permit Conditions) has been revised to clarify that noncompliance with any requirement of this permit may result in an enforcement action against the permittee, an action to modify, revoke, reissue or terminate the source's permit, and/or a denial of the permittee's application to renew the permit. In addition, except for those permit conditions that are not federally enforceable, noncompliance is also a violation of the federal Clean Air Act.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, ~~except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:~~
- (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) **Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.**
- (~~bc~~) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (~~ed~~) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

Comment 3: On page 34, Condition C.20 (Actions related to Noncompliance Demonstrated by a Stack Test), under (a), within the second sentence the word “resopnse” was misspelled. It should be “response”.

Response to Comment 3:

The word “resopnse” has been revised to the correct spelling “response”.

C.20 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these ~~reseponse~~ actions to IDEM-OAQ and HDEM within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

Comment 4: On page 41, Condition D.1.11 (Reporting Requirements) (a), the wording should be changed slightly as follows:

D.1.11 Reporting Requirements

- (a) A **natural gas-fired boiler** certification, signed by the responsible official, that certifies all of the fuels combusted during the period. The ~~natural gas-fired boiler~~ certification does require the certification by the responsible official as defined by 326 IAC 2-7-1(34);

Comment 5: On page 44, Condition D.2.9 (Record Keeping Requirements) (a) (3), it states that the natural gas fired boiler certification does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34). This is incorrect. The certification does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Response to Comment 5:

The certification does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34). Condition D.2.9 has been modified accordingly.

D.2.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the NO_x and SO₂ emission limits established in Conditions D.2.1 and D.2.2.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34); and

Comment 6: On pages 53 and 59, Conditions D.4.6 and D.7.8 (Parametric Monitoring), where it states that the pressure drop across the scrubbers shall be maintained with the range of 1.0 and 5.0 inches of water, the word “with” should be changed to “within” and the range from 5.0 to 10.0. Add “or as recommended by the equipment manufacturer” to this same sentence of this paragraph. Change the word “amperage” to “pressure” accordingly.

Response to Comment 6:

The differential pressure range has been modified as requested. The phrase “or as recommended by the equipment manufacturer” has been added. The word “amperage” has been changed to “pressure” accordingly.

D.4.6 Parametric Monitoring

The Permittee shall record the flow rate and total static pressure drop across each scrubber used in conjunction with Units 30 and 17 at least once daily when in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the scrubbers shall be maintained ~~within~~ the range of ~~4.0 and 5.0~~ **and 10.0** inches of water, ~~or a range established during the latest stack test~~ **or as recommended by the equipment manufacturer**. The Compliance Response Plan for this unit shall contain troubleshooting and response steps for when the ~~amperage~~ **pressure** is outside of the normal range as recommended by the manufacturer.

D.7.8 Parametric Monitoring

- (a) The Permittee shall monitor the amperage on the fan motor of the electrostatic precipitator used in conjunction with the Sulfonation Process, at least once daily when the process is in operation. The Compliance Response Plan for this unit shall contain troubleshooting and response steps for when the amperage is outside of the normal range as recommended by the manufacturer.
- (b) The Permittee shall record the flow rate and total static pressure drop across each scrubber used in conjunction with this facility at least once daily when in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the scrubbers shall be maintained ~~within~~ the range of ~~4.0 and 5.0~~ **and 10.0** inches of water, ~~or a range established during the latest stack test~~ **or as recommended by the equipment manufacturer**. The Compliance Response

Plan for this unit shall contain troubleshooting and response steps for when the ~~amperage~~ **pressure** is outside of the normal range as recommended by the manufacturer.

Comment 7: On page 56, Condition D.5.5 (Visible Emissions Notations) (a), where it states visible emission notations of the Stack 18A exhaust, Stack 19A should also be included.

Response to Comment 7:

Stack 19A was mistakenly left out. Stack 19A has been included as follows:

D.5.5 Visible Emissions Notations

Visible emission notations of the Stack 18A **and Stack 19A** exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

Comment 8: On page 60, Condition D.7.12 (Record Keeping Requirements) (c), the wrong Condition was cited. It should cite Condition D.7.9.

Response to Comment 8:

In Condition D.7.12(c), Condition D.7.8 was mistakenly cited. It has been corrected to Condition D.7.9.

D.7.12 Record Keeping Requirements

- (a) To document compliance with Condition D.7.7, the Permittee shall maintain daily records of visible emission notations of the stack exhaust.
- (b) To document compliance with Condition D.7.8, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure;
 - (B) Air to water ratio; and
 - (C) Flow rate.
- (c) To document compliance with Condition D.7.~~89~~, the Permittee shall maintain records of the results of inspections.

Comment 9: On page 61, Condition D.8.2 (Particulate Matter (PM10) Limit [Hammond Ordinance No. 3522]) was modified to include "Air Quality Control" and "(as amended)" in the 1st line.

Response to Comment 9:

For consistency, Condition D.8.2 (Particulate Matter (PM10) Limit [Hammond Ordinance No. 3522]) was modified to include "Air Quality Control" and "(as amended)" in the 1st line.

D.8.2 Particulate Matter (PM10) Limit [Hammond Ordinance No. 3522]

Pursuant to Hammond **Air Quality Control** Ordinance No. 3522 (**as amended**), PM10 emissions from the Preservative Addition System shall not exceed 0.017 pounds per hour or 0.0745 tons per year.

Comment 10: On page 64, Condition D.9.1 (Volatile Organic Compounds (VOC)) (5) (B), the first "is" was removed from the sentence.

Response to Comment 10:

The first "is" was removed from the sentence.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight (38) degrees Celsius (one hundred (100) degrees Fahrenheit), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

IDEM-OAQ submitted the following comments on October 18, 2001:

Part 70 Operation Permit

Comment 1: On page 16, in Condition B.10 Annual Compliance Certification within the IDEM address, Compliance Data Section should be changed to Compliance Branch.

Response to Comment 1:

Compliance Data Section has been replaced by Compliance Branch.

Indiana Department of Environmental Management
~~Compliance Data Section~~ **Compliance Branch**, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

Comment 2: On page 38 of 70 of the permit, Condition D.1.7 Testing Requirements should be removed if stack testing is not required.

Response to Comment 2:

On page 38, Condition D.1.7 Testing Requirements has been removed since stack testing is not required.

The following conditions were also removed:

Page 51 of 70 of the permit, Condition D.4.3 Testing Requirements
Page 54 of 70 of the permit, Condition D.5.3 Testing Requirements
Page 56 of 70 of the permit, Condition D.6.2 Testing Requirements
Page 57 of 70 of the permit, Condition D.7.5 Testing Requirements
Page 60 of 70 of the permit, Condition D.8.4 Testing Requirements
Page 63 of 70 of the permit, Condition D.9.2 Testing Requirements

Comment 3: On page 41 of 70 of the permit, Section D.2 Powerhouse Boiler No. 1, 326 IAC 6-1-2 and 326 IAC 7-4-1.1 need to be addressed in condition D.1.2.

Response to Comment 3:

326 IAC 6-1-2(b) specifies two (2) PM emission limits: natural gas (0.01 gr/dscf) and fuel oil (0.15 lb/MMBtu). Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) PM emissions shall not exceed five-hundredths (0.05 lb/MMBtu) heat input, therefore; the source is in compliance with 326 IAC 6-1-2. This statement has been included in Condition D.2.2. Also a separate condition has been added to address 326 IAC 6-1-2(b) specifically.

The SO₂ emission limit specified within 326 IAC 7-4-1.1 Lake County sulfur dioxide emission limitations, 0.3 lb/MMBtu, does not apply since the combustion unit does not have a maximum capacity of less than 20 MMBtu/hr actual heat input.

D.2.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart Db]
[326 IAC 6-1-2]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), emissions from Powerhouse Boiler No. 1 shall not exceed the following:

- (a) Five-hundredths (0.05) pound PM per million Btu (MMBtu) heat input, **therefore; the boiler is also in compliance with 326 IAC 6-1-2.**
- (b) Twenty percent (20%) opacity except for one six-minute period per hour of not more than twenty-seven (27%) opacity.
- (c) Five-tenths (0.5) pound SO₂ per million Btu (MMBtu) heat input and 90% reduction in SO₂ emissions.
- (d) Two-tenths (0.20) pound NO_x per million Btu (MMBtu) heat input.

Compliance with this limitation shall satisfy the PM and SO₂ requirements of 326 IAC 6-1-2 and 326 IAC 7-1.1, respectively.

D.2.3 Particulate Matter (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(b)(Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the Powerhouse Boiler No. 1 shall be limited to 0.01 grain per dry standard cubic foot (natural gas) and 0.15 lb/MMBtu (fuel oil).

Comment 4: On page 43 of 70 of the permit, under Condition D.2.9 Record Keeping Requirements, the statement, "To document compliance with Condition D.2.8, the Permittee shall maintain records of inspections as specified in Condition D.2.8(b)" should be added.

Response to Comment 4:

The statement "To document compliance with Condition D.2.8, the Permittee shall maintain records of inspections as specified in Condition D.2.8(b)" was added under Condition D.2.9 as follows:

D.2.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1 and D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6)

shall be taken monthly and shall be complete and sufficient to establish compliance with the NO_x and SO₂ emission limits established in Conditions D.2.1 and D.2.2.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (b) To document compliance with Condition D.2.1, the Permittee shall maintain daily records of the quantity in gallons of #2 fuel oil burned.
- (c) To document compliance with Condition D.2.7, the Permittee shall maintain records of visible emission notations of the Stack 1 exhaust while combusting fuel oil.
- (d) To document compliance with Condition D.2.8, the Permittee shall maintain records of inspections as specified in Condition D.2.8 (b).**
- (de)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment 5: On page 48 of 70 of the permit, in Condition D.3.6 Particulate Matter (PM) the word "that" should be changed to "when."

Response to Comment 5:

The change was made accordingly.

D.3.6 Particulate Matter (PM)

The dust collection systems for PM control shall be in operation and control emissions from these facilities at all times ~~that~~ **when** the facilities are in operation.

Comment 6: On page 49 of 70 of the permit, Condition D.3.7 Visible Emissions Notations should be modified to state that visible emission notations shall be performed once per shift instead of once per day. Also affected by this change is Condition D.3.11 Record Keeping Requirements on page 50 of 70 of the permit. Daily should be changed to once per shift.

Response to Comment 6:

The agencies believe that a visible emission notation once per shift is a reasonable requirement. Therefore, the requirements to perform visible emissions notations have been changed from daily to once per shift. Compliance monitoring conditions are in the permit in order to ensure continuous compliance with the requirements. The suggested wording

would allow sporadic use of compliance monitoring, which would not accomplish the purpose of compliance monitoring. Baghouse failure can occur suddenly; therefore monitoring of baghouse operational parameters should be more frequently than daily in such cases where a source operates more than one shift per day.

Also affected are the following conditions:

Page 39 of 70 of the permit, Condition D.1.9 Visible Emission Notations,
Page 40 of 70 of the permit, Condition D.1.10 Record Keeping Requirements,
Page 42 of 70 of the permit, Condition D.2.7 Visible Emission Notations,
Page 43 of 70 of the permit, Condition D.2.9 Record Keeping Requirements,
Page 52 of 70 of the permit, Condition D.4.5 Visible Emission Notations,
Page 53 of 70 of the permit, Condition D.4.9 Record Keeping Requirements,
Page 55 of 70 of the permit, Condition D.5.5 Visible Emission Notations,
Page 55 of 70 of the permit, Condition D.5.6 Record Keeping Requirements,
Page 58 of 70 of the permit, Condition D.7.7 Visible Emission Notations, and
Page 59 of 70 of the permit, Condition D.7.12 Record Keeping Requirements.

Comment 7: On page 56 of 70 of the permit, Condition D.6.1 Volatile Organic Compounds (VOCs) should be modified to include 326 IAC 8-9-1 language.

Response to Comment 7:

326 IAC 8-9-1 language has been included in Condition D.6.1.

D.6.1 Volatile Organic Compounds (VOCs) [326 IAC 8-9]

Pursuant to 326 IAC 8-9-1, stationary vessels used to store volatile organic liquid (VOL) that are located in Lake County and have a capacity of less than thirty-nine thousand (39,000) gallons are subject to the reporting and record keeping provisions of section 6(a) and 6(b) of this rule and are exempt from all other provisions of this rule.

Any change or modification to this facility that would increase potential volatile organic compound (VOC) emissions, as specified in 326 IAC 2-1, must be approved by the Office of Air Quality (OAQ) and HDEM before such change or modification can occur.

Comment 8: On page 58 of 70 of the permit, two (2) conditions need to be added: one for Electrostatic Precipitator Inspections and one for Electrostatic Precipitator Failure Detection.

Response to Comment 8:

Condition D.7.9 Electrostatic Precipitator Inspections and Condition D.7.10 Electrostatic Precipitator Failure Detection have been added.

D.7.9 Electrostatic Precipitator Inspections

An inspection shall be performed each calendar quarter of the electrostatic precipitator controlling this facility. Confirmed defective electrostatic precipitator part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of electrostatic precipitator part(s) replaced.

D.7.10 Electrostatic Precipitator Failure Detection

In the event that an electrostatic precipitator 's failure has been observed:

- (a) The affected unit will be shut down immediately until the failed unit has been replaced.**

- (b) **Based upon the confirmed findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.**

Conditions following have been renumbered.

Comment 9: On page 59 of 70 of the permit, Condition D.7.12 Record Keeping Requirements has been modified to include additional record keeping requirements for Cold Shutdown(s)/Start-Up(s). These requirements are part of their Special Operation Permit Conditions.

Response to Comment 9:

Record keeping requirements for Cold Shutdown(s)/Start-Up(s) were included in Condition D.7.12 as follows:

D.7.12 Record Keeping Requirements

- (a) To document compliance with Condition D.7.7, the Permittee shall maintain daily records of visible emission notations of the stack exhaust.
- (b) To document compliance with Condition D.7.8, the Permittee shall maintain the following:
- (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (B) Inlet and outlet differential static pressure;
 - (B) Air to water ratio; and
 - (C) Flow rate.
- (c) To document compliance with Condition D.7.9, the Permittee shall maintain records of the results of inspections.
- (d) Pursuant to Operating Permit No. 01688 and to document compliance with Condition D.7.11, the Permittee shall maintain records of the following:
- (1) All regular and emergency maintenance work performed on the demister;
 - (2) Inspections of the different components of this unit;
 - (3) Weekly activation of the spray nozzles for cleaning of the mesh pad; and
 - (4) Annual inspections of the interior parts of the demister.
- (e) **Pursuant to Operating Permit No. 01688, the Permittee shall record and maintain a log of Sulfonation Process Cold Shutdown(s)/Start-Up(s) as follows:**
- (1) **The Permittee shall notify HDEM at least one week prior to a cold shutdown (total plant shutdown for planned maintenance) of the Sulfonation Process. The notification shall include the anticipated date and time of start-up after the said cold shutdown.**
 - (2) **The Permittee shall notify HDEM at least 24-hours prior to starting up after a cold shutdown.**
 - (3) **The Permittee shall record and maintain a log of Sulfonation Process operating status including the date and times.**

- (ef) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Comment 10: On page 62 of 70 of the permit, Condition D.9.1 Volatile Organic Compounds (VOC) should be modified to include 326 IAC 8-3-2 language/requirements.

Response to Comment 10:

Language/requirements for 326 IAC 8-3-2 have been included within Condition D.9.1, language for 326 IAC 8-3-5 has been moved to Condition D.9.2, and language/requirements for 326 IAC 8-3-8 have been included within Condition D.9.3 as follows:

D.9.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations after January 1, 1980, performing organic solvent degreasing operations located anywhere in the state, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.9.42 Volatile Organic Compounds (VOC) [~~326 IAC 8-3-2~~][326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser without remote solvent reservoirs existing as of ~~July 1, 1990~~ **January 1, 1980**, located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph counties shall ensure that the following requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight (38) degrees Celsius (one hundred (100) degrees Fahrenheit);
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at

thirty-eight (38) degrees Celsius (one hundred (100) degrees Fahrenheit), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight (38) degrees Celsius (one hundred (100) degrees Fahrenheit), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility without remote solvent reservoirs existing as of January 1, 1980, located in Clark, Elkhart, Floyd, Lake, Marion, Porter or St. Joseph counties shall ensure that the following requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.9.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaning Degreasers) users, providers, and manufacturers of solvents for use in cold cleaning degreasers in Clark, Floyd, Lake, and Porter Counties, except for solvents intended to be used to clean electronic components, shall ensure that the following requirements are met:

- (a) **Material requirements are phased in as follows:**
 - (1) **On and after May 1, 2001, no person shall do the following:**
 - (A) **Operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).**

- (b) **On and after November 1, 1999, the following record keeping requirements shall be followed:**
- (1) **All persons subject to the requirements of subsection (a)(1)(A) shall maintain each of the following records for each purchase:**
- (A) **The name and address of the solvent supplier.**
 - (B) **The date of purchase.**
 - (C) **The type of solvent.**
 - (D) **The volume of each unit of solvent.**
 - (E) **The total volume of the solvent.**
 - (F) **The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).**
- (c) **All records required by subsection (b) shall be retained on-site for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.**

On December 1, 2001, IDEM asked that the following changes be made to all Title V's to correct deficiencies identified by EPA and agreements from the CASE coalition group.

1. **Prompt Reporting of Deviations:** Per EPA there cannot be a requirement to do something in a permit, then say that it's not a deviation when the source does not do it [see 40 CFR 70.6(a)(6)(i)]. Conditions B.15 Deviations from Permit Requirements and Conditions and Parametric Monitoring Conditions D.3.8, D.4.5, and D.7.7 have been revised to clarify the facility specific events that would not qualify as a deviation.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. ~~Deviations that are required to be reported by an applicable requirement~~ **A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit**, shall be reported according to the schedule stated in the applicable requirement and ~~de~~ **does** not need to be included in this report.

~~The notification by the Permittee~~ **Quarterly Deviation and Compliance Monitoring Report** does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit. ~~or a rule. It does not include:~~

(1) ~~An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~

(2) ~~Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.~~

~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.~~

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

D.3.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse used in conjunction with the manufacturing processes, at least once weekly when the processes are in operation when venting to the atmosphere. ~~Unless operated under conditions for which the Compliance Response Plan specifies otherwise,~~ **When for any one reading,** the pressure drop across each baghouse ~~shall be maintained within~~ **is outside** the normal range of 1.0 and 8.0 inches of water, a range established during the latest stack test or as recommended by the equipment manufacturer. ~~The , the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Failure to Take Response Steps. for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM – OAQ and HDEM and shall be calibrated at least once every six (6) months.

D.4.5 Parametric Monitoring

The Permittee shall record the flow rate and total static pressure drop across each scrubber used in conjunction with Units 30 and 17 at least once daily when in operation. ~~Unless operated under conditions for which the Compliance Response Plan specifies otherwise,~~ **When for any one reading,** the pressure drop across the scrubbers ~~shall be maintained within~~ **is outside** the normal range of 5.0 and 10.0 inches of water, a range established during the latest stack test or as recommended by the equipment manufacturer. ~~The , the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Failure to Take Response Steps. for this unit shall contain troubleshooting and response steps for when the pressure is outside of the normal range as recommended by the manufacturer. A pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

D.7.7 Parametric Monitoring

- (a) The Permittee shall monitor the amperage on the fan motor of the electrostatic precipitator used in conjunction with the Sulfonation Process, at least once daily when the process is in operation. The Compliance Response Plan for this unit shall contain troubleshooting and response steps for when the amperage is outside of the normal range as recommended by the manufacturer.
- (b) The Permittee shall record the flow rate and total static pressure drop across each scrubber used in conjunction with this facility at least once daily when in operation. ~~Unless operated under conditions for which the Compliance Response Plan specifies otherwise,~~ **When for any one reading,** the pressure drop across the scrubbers ~~shall be maintained within~~ **is outside** the normal range of 5.0 and 10.0 inches of water, a range established during the latest stack test or as recommended by the equipment manufacturer. ~~The ,~~ **the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Failure to Take Response Steps.** ~~for this unit shall contain troubleshooting and response steps for when the pressure is outside of the normal range as recommended by the manufacturer. A~~ **pressure reading that is outside the above-mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.**

- 2. Certification by Responsible Official:** Part 70 requires any application form, report, or compliance certification to be certified by the Responsible Official. Condition C.9 (Asbestos Abatement Projects) has been revised so that the Permittee understands that the asbestos notification should be certified by the owner or operator and not the responsible official. Condition C.19 (Actions Related to Noncompliance Demonstrated by a Stack Test), has been revised to require a certification by the Responsible Official for the notification sent in response to non-compliance with a stack test.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.

- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

C.20 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM-OAQ and HDEM within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM-OAQ and HDEM that retesting in one-hundred and twenty (120) days is not practicable, IDEM-OAQ and HDEM may extend the retesting deadline.

- (c) IDEM-OAQ and HDEM reserve the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do ~~not~~ require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

3. **Excuse from Monitoring Failures:** Condition C.19 Compliance Monitoring Plan - Failure to Take Response Steps has been revised. These changes are more or less an attempt to re-organize the condition and clarify its intent. Paragraph (a) was revised to simply state that the source is required to prepare a CRP. Paragraph (b) states the source is required to implement the CRP. Paragraph (c) defines when the source is excused from taking response steps. Paragraph (d) clarifies that corrective action doesn't automatically excuse a deviation. Paragraph (e) defines the record keeping requirements. Paragraph (f) clarifies when monitoring is required. The old paragraph (f) has been removed since we do not have the authority through Part 70 to create an exemption from reporting failures.

C.19 Compliance Monitoring Response Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to **prepare** ~~implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:~~

(1) ~~— This condition;~~

(2) ~~— The Compliance Determination Requirements in Section D of this permit;~~

(3) ~~— The Compliance Monitoring Requirements in Section D of this permit;~~

(4) ~~— The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and~~

(5) ~~— A a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRPs shall be submitted to IDEM-OAQ and HDEM upon request, and shall be subject to review and approval by IDEM-OAQ and HDEM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, and maintained on site, and is comprised of:~~

(A1) Reasonable response steps that may be implemented in the event that ~~compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and an~~ **expected timeframe for taking reasonable response steps.**

(B) ~~— A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.~~

- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition **as follows:** ~~Failure to take reasonable response steps shall constitute a violation of the permit.~~
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
- (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) ~~Upon investigation of a compliance monitoring excursion, the~~ The Permittee is excused from taking **not required to take any** further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment **and** ~~This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.~~
- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- ~~(d)(e) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. The Permittee shall record all instances~~

when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

~~(e)(f) Except as otherwise provided by a rule or provided specifically in Section D, All all monitoring as required in Section D shall be performed at all times when the equipment emission unit is operating, except for time necessary to perform quality assurance and maintenance activities. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.~~

~~(e) At its discretion, IDEM and HDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.~~

The following updates have been made to incorporate the Article 2 rule revisions that were adopted on October 3, 2001, and become effective on January 19, 2002. For more information about this rulemaking, refer to the October 2001 Air Pollution Control Board Packet which can be found on the internet at <http://www.state.in.us/idem/air/rules/apcb/packets/index.html>. The rule revisions will be published in the February 1, 2002 Indiana Register which can be found on the internet at <http://www.IN.gov/legislative/register/index-25.html>.

Part 70 Permit

1. Add the new rule cite to B.2 Permit Term

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

2. B.12 Emergency Provisions (a)(b) and (g) have been revised to reflect rule changes to 326 IAC 2-7-6.

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation; ~~except as provided in 326 IAC 2-7-16.~~

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a ~~health-based or~~ technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;

- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM-OAQ and HDEM within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM-OAQ

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

HDEM

Telephone Number: 219-853-6306

Facsimile Number: 219-853-6343

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Avenue, Room 304
Hammond, Indiana 46320

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM-OAQ and HDEM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM-OAQ and HDEM by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) ~~Operations may continue during an emergency only if the following conditions are met:~~

- ~~(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.~~
- ~~(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:~~
 - ~~(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~
 - ~~(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.~~

~~Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.~~

3. B.14 Multiple Exceedances has been deleted, because 326 IAC 2-7-5(1)(E) has been repealed.

~~B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]~~

~~Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.~~

4. B.14 Prior Permits Superseded was added to the permit to help clarify the intent of the new rule 326 IAC 2-1.1-9.5.

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

5. Remove (b) from B.13 Permit Shield. Since B.14 Prior Permits Superseded has been added to the permit, it is not necessary for this statement to be in this condition.

B.13 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

~~(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.~~

(eb) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM-OAQ and HDEM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(ec) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(ed) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
- (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
- (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

- (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
 - (fe) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
 - (gf) This permit shield is not applicable to modifications eligible for group processing until after IDEM-OAQ or HDEM has issued the modifications. [326 IAC 2-7-12(c)(7)]
 - (hg) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM-OAQ or HDEM has issued the modification. [326 IAC 2-7-12(b)(7)]
- 6. C.19 Compliance Response Plan – Failure to Take Response Steps (c)(2) “an administrative amendment” has been revised to “a minor permit modification”, because 326 IAC 2-7-11(a)(7) has been repealed. Requests that do not involve significant changes to monitoring, reporting, or record keeping requirements may now be approved as minor permit modifications.
- C.19 Compliance Response Plan - ~~Failure to Take Response Steps~~ Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
 - (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRPs shall be submitted to IDEM-OAQ and HDEM upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee’s current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
 - (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee’s current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for ~~an administrative amendment~~ **a minor permit modification** to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

The name change in condition C.19 Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports** also affects Visible Emissions Notations Conditions D.1.8, D.2.8, D.3.7, D.4.4, D.5.4, and D.7.6; Preventive Inspections Condition D.2.9; Broken or Failed Bag Detection Conditions D.3.10; and Parametric Monitoring Conditions D.3.8, D.4.5, and D.7.7.

IDEM-OAQ submitted the following comments on January 18, 2002:

Part 70 Operation Permit

Comment 1: On page 39 of 69 of the permit, Condition D.2.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart Db] [326 IAC 6-1-2] has been modified to include the rule cite 326 IAC 7-1.1 and ", therefore; the boiler is also in compliance with 326 IAC 6-1-2" was removed from (a).

Response to Comment 1:

The rule cite has been added and ", therefore; the boiler is also in compliance with 326 IAC 6-1-2" was removed from (a).

D.2.2 New Source Performance Standard (NSPS) [326 IAC 12] [40 CFR 60, Subpart Db] [326 IAC 6-1-2] [326 IAC 7-1.1]

Pursuant to 326 IAC 12 and 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units), emissions from Powerhouse Boiler No. 1 shall not exceed the following:

- (a) Five-hundredths (0.05) pound PM per million Btu (MMBtu) heat input, ~~therefore, the boiler is also in compliance with 326 IAC 6-1-2.~~
- (b) Twenty percent (20%) opacity except for one six-minute period per hour of not more than twenty-seven (27%) opacity.
- (c) Five-tenths (0.5) pound SO₂ per million Btu (MMBtu) heat input and 90% reduction in SO₂ emissions.
- (d) Two-tenths (0.20) pound NO_x per million Btu (MMBtu) heat input.

Compliance with this limitation shall satisfy the PM and SO₂ requirements of 326 IAC 6-1-2 and 326 IAC 7-1.1, respectively.

Comment 2: On page 47 of 69 of the permit, Condition D.3.7 Visible Emissions Notations (a) visible emissions notations need to be performed once per shift, not once per day.

Response to Comment 2:

Condition D.3.7 Visible Emissions Notations (a), the frequency of visible emissions notations was changed to once per shift.

D.3.7 Visible Emissions Notations

- (a) Visible emission notations of the stack exhausts from these facilities shall be performed once per ~~day~~ **shift** during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

Comment 3: On page 50 of 69 of the permit, Condition D.4.4 Visible Emissions Notations (a) visible emissions notations need to be performed once per shift, not once per day.

Response to Comment 3:

Condition D.4.4 Visible Emissions Notations (a), the frequency of visible emissions notations was changed to once per shift.

D.4.4 Visible Emissions Notations

- (a) Visible emission notations of the exhaust from Stacks 2A and 19 shall be performed once per ~~day~~ **shift** during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

Comment 4: On page 52 of 69 of the permit, Condition D.5.4 Visible Emissions Notations (a) visible emissions notations need to be performed once per shift, not once per day.

Response to Comment 4:

Condition D.5.4 Visible Emissions Notations (a), the frequency of visible emissions notations was changed to once per shift.

D.5.4 Visible Emissions Notations

- (a) Visible emission notations of the Stack 18A and Stack 19A exhausts shall be performed once per ~~day~~ **shift** during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

Comment 5: On page 55 of 69 of the permit, Condition D.7.6 Visible Emissions Notations (a) visible emissions notations need to be performed once per shift, not once per day.

Response to Comment 5:

Condition D.7.6 Visible Emissions Notations (a), the frequency of visible emissions notations was changed to once per shift.

D.7.6 Visible Emissions Notations

- (a) Visible emission notations of the Sulfonation stack exhaust shall be performed once per ~~day~~ **shift** during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

Also the reference to "COMPLIANCE DATA SECTION" has been removed from the Certification form since the form is used for multiple purposes.

**Indiana Department of Environmental Management
Office of Air Quality
and
Hammond Department of Environmental Management**

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Conopco, Inc. d/b/a Unilever HPC USA ("Unilever HPC")
Source Location: 1200 Calumet Avenue, Hammond, Indiana 46320
County: Lake
SIC Code: 2841 – Soap & Other Detergents
Operation Permit No.: T089-6623-00229
Permit Reviewer: Debra Malone, HDEM

The Hammond Department of Environmental Management (HDEM) has reviewed a Part 70 permit application from **Unilever HPC** relating to the operation of a stationary soap manufacturing plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- 1) Boilers, identified as follows:
 - a) Babcock-Wilcox Boiler No. 3, identified as Unit No. 2, constructed in 1932, with a maximum capacity of 82.4 MMBtu per hour, primarily natural gas fired with No. 6 fuel oil as an alternate fuel, and exhausting to Stack 2.
 - b) Babcock-Wilcox Boiler No. 4, identified as Unit No. 3, constructed in 1936, with a maximum capacity of 82.4 MMBtu per hour, primarily natural gas fired with No. 6 fuel oil as an alternate fuel, and exhausting to Stack 2.
 - c) American Hydrotherm Boiler No. 1, identified as Unit No. 16, constructed in 1985, with a maximum capacity of 12.22 MMBtu per hour, natural gas-fired only and exhausting to Stack 18.
 - d) American Hydrotherm Boiler No. 2, identified as Unit No. 29, constructed February 22, 1989, with a maximum capacity of 12.22 MMBtu per hour, primarily natural gas fired with No. 2 fuel oil as a standby fuel, and exhausting to Stack 1A.

- 2) Powerhouse Boiler No. 1, identified as Unit No. 49, constructed in 1995 and modified in 2001, with a maximum capacity of 120 MMBtu per hour, primarily natural gas fired with No. 2 fuel oil as a standby fuel, and exhausting to Stack 1.
- 3) Manufacturing Processes controlled by Dust Collector Systems, identified as follows:
 - a) Soap Rework Grinding Process, identified as Unit 11, constructed in 1979, controlled by a dust collection system, with a maximum capacity of 4,167 pounds per hour and exhausting to Stack 13.
 - b) Three (3) Vacuum System Soap Dryers, identified as Unit 12, constructed in 1979, controlled by a bag collector with a combined maximum amount of soap produced for all three dryers of 28,713 pounds per hour and exhausting to Stack 14.
 - c) Five (5) Noodles Bins and One (1) Scrap Soap Kettle, identified as Unit 13, constructed in 1979, controlled by a filter bag collector with a maximum of 32,880 pounds per hour of soap handled and exhausting to Stack 15.
 - d) Hard Soaps Finishing Lines No. 1, 2 and 3, identified as Unit 14, constructed in 1979, controlled by three (3) dust collectors, with a maximum capacity of 29,425 pounds per hour and exhausting to Stack 16.
 - e) Hard Soaps Finishing Lines No. 5, 7 and 8, identified as Unit 15, constructed in 1979, controlled by three (3) dust collectors, with a maximum capacity of 29,425 pounds per hour and exhausting to Stack 17.
 - f) Soap Noodle Bin No. 1 Dust Collection System (DC-5), identified as Unit 18, constructed in 1985, used to control soap dust from the transfer of soap noodles or pellets via an air conveyor system to Noodle Bins No. 1, 2, 3, or 4 (connected to a common header), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 20.
 - g) Soap Noodle Bin No. 2 Dust Collection System (DC-6), identified as Unit 19, constructed in 1985, used to control soap dust from the transfer of soap noodles or pellets via an air conveyor system to Noodle Bins No. 1, 2, 3, or 4 (connected to a common header), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 21.
 - h) Soap Noodle Bin No. 3 Dust Collection System (DC-7), identified as Unit 20, constructed in 1985, used to control soap dust from the transfer of soap noodles or pellets via an air conveyor system to Noodle Bins No. 1, 2, 3, or 4 (connected to a common header), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 22.
 - i) Chip Mixer No. 1, identified as Unit No. 21, constructed in 1985, controlled by a dust collection system (DC-8), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 23.

- j) Chip Mixer No. 2, identified as Unit No. 22, constructed in 1985, controlled by a dust collection system (DC-9), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 23.
- k) Chip Mixer Nos. 3 and 4, identified as Unit No. 23, constructed in 1985, controlled by a dust collection system (DC-10), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 23.
- l) Powder Dye Mixing System, identified as Unit 24, constructed in 1985, controlled by a dust collection system (DC-4), with a maximum capacity of 10 pounds per hour and exhausting to Stack 26.
- m) Zinc Oxide Catalyst Weight Station and three Apron Conveyors drives (Lines 1, 2, & 3), identified as Unit 25, constructed in 1985, controlled by a dust collection system (DC-3), with a maximum design rate of soap to be processed of 4,000 pounds per hour and exhausting to Stack 27.
- n) Detergent Bar Soap Facility Milling and Pelletizing, identified as Unit 26, constructed in 1985, controlled by a dust collection system (DC-1), with a maximum capacity of 23,625 pounds per hour and exhausting to Stack 28.
- o) Three (3) Chill Rolls and Apron Conveyors (Lines 1, 2, & 3), identified as Unit 27, constructed in 1985, controlled by a dust collection system (DC-2), with a maximum capacity of 18,000 pounds per hour and exhausting to Stack 29.
- p) Flex-Kleen Dust Collector System (DC-1053), identified as Unit 31, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 3A.
- q) Flex-Kleen Dust Collector System (DC-1054), identified as Unit 32, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 4A.
- r) Flex-Kleen Dust Collector System (DC-1055), identified as Unit 33, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 5A.

- s) Flex-Kleen Dust Collector System (DC-1056), identified as Unit 34, constructed in 1990, used to control the exhaust from a soap noodle bin, a rework feed hopper, a remelt hopper, and Detergent Bar Soap Manufacturing Line No. 5 Noodle Bin when producing product, and Line No. 4, with a maximum capacity of 5,976 pounds per hour and exhausting to stack 6A.
 - t) Flex-Kleen Dust Collector System (DC-1052), identified as Unit 35, constructed in 1990, used to control the exhaust from pick-up points along Bar Soap Finishing Lines #4 and #5. Pick-up points are distributed for maximum dust reduction along the lines including plodder/extruder hoppers, duplex refiners, apron/screw conveyors, incline conveyors, pelletizing refiners, noodle hoppers, and chip mixers, rework grinder and the TiO₂ dump station. The unit has a maximum capacity of 5,976 pounds per hour and exhausts to stack 7A.
 - u) Flex-Kleen Dust Collector System (DC-1051), identified as Unit 36, originally constructed in 1990, and modified in 2001 to be part of a dust collector header system integrating dust collectors DC-1051, DC-1053, DC-1054, and DC-1055. The dust collector header collects dust from the soap noodle bins, rework feed hoppers, re-melt hoppers and other miscellaneous pick-up points associated with maintenance clean up, with a maximum capacity of 5,976 pounds per hour and exhausts to stack 8A.
 - v) Sample Detergent Bar Soap Line, identified as Unit 45, constructed in 1979, including soap supply hopper, conveyors, refiner feed hopper and soap return conveyors, controlled by a dust collector, with a maximum design rate of 1,688 pounds per hour of material handled and exhausting to Stack 17A.
 - w) No. 1 and No. 2 Noodle Bins, identified as Unit 48, constructed in 1979, controlled by a dust collector, with a maximum capacity of 10,000 pounds per hour and exhausting to Stack 46.
- 4) Manufacturing Processes controlled by wet scrubber systems:
- a) Seven (7) liquid "Drais" mixers, two (2) reactors, and two (2) strippers (for Lines 4 through 7), identified as Unit 30, constructed in 1990, controlled by a Schneible wet scrubber and demister collection system. In case of a rupture disk failure, emissions from knockout tanks H-30675 and H-30676 will also be controlled by this system. This system also includes Line 4 melt tank and hold tank, and Lines 5, 6, and 7 melt tanks. In addition, the three (3) Holding Tanks and Melt Tanks from Lines 1, 2, and 3 are tied into this system for housekeeping purposes. The scrubber-demister system has a maximum capacity of 1,743 pounds per hour of material handled and exhausts to Stack 2A.
 - b) Three (3) liquid "Drais" mixers, two (2) reactors, and (2) two strippers (for Lines 1 through 3), identified as Unit 17, constructed in 1985, controlled by a Schneible wet scrubber and demister collector system. In case of a rupture disk failure, emissions from knockout tanks H-30673 and H-30674 will also be controlled by this system. System has a maximum capacity of 5,049 pounds per hour of material handled and exhausts to Stack 19.

- 5) Soap Dryer/Cleanout Systems identified as follows:
 - a) Soap Dryer/Cleanout System Tank No. 1, identified as Unit 46, constructed in 1979, used to clean the interiors of the three (3) soap dryers in the Bar Finishing Department, controlled by a mist eliminator, with a maximum amount of fatty acid recirculated of 168,000 pounds per hour and exhausting to Stack 18A.
 - b) Soap Dryer/Cleanout System Tank No. 2, identified as Unit 47, constructed in 1979, used to clean the interiors of the three (3) soap dryers in the Bar Finishing Department, controlled by an impingement separator, with a maximum amount of fatty acid circulated of 168,000 pounds per hour, and exhausting to Stack 19A.
- 6) Storage Tanks, identified as follows:
 - a) Storage Tank No. 26, identified as Unit 62, constructed in 1930, with a maximum design capacity of 141,400 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.
 - b) Storage Tank No. 28, identified as Unit 63, constructed in 1930, with a maximum design capacity of 141,400 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.
 - c) Fuel Oil Day Tank, identified as Unit 64, constructed in 2001, with a maximum design capacity of 18,000 gallons, containing No. 6 Fuel Oil with a true vapor pressure less than 0.00004 psia at 60 degrees F.
- 7) Sulfonation Process, including a sulfur burner, SO₂ heat exchanger, catalytic gas converter, a second SO₂ heat exchanger, reactor, sulfuric acid scrubber, electrostatic precipitator, caustic scrubbing tower and a demister, identified as Unit 4, constructed in 1967, with a maximum production rate of alkyl benzene sulfonic acid of 6,500 pounds per hour and exhausting to Stack 4.
- 8) Preservative Addition System, identified as Unit 50, constructed in 1997, and controlled by primary and secondary filters, in which preservative powder is vacuum transferred at a maximum rate of 2,000 pounds per hour to a vacumax receiver atop a mixing tank. The preservative is mixed with perfume for subsequent addition to the soap process.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Two (2) laboratories. [326 IAC 2-7-1(21)(D)]

- (b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour. [326 IAC 2-7-1(21)(G)(i)(BB)]
- (c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
[326 IAC 2-7-1(21)(G)(ii)(AA)]
- (d) The following VOC and HAP storage containers:
 - A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons. (Building 14 dye mixing tanks)
 - B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.[326 IAC 2-7-1(G)(iii)(AA)&(BB)]
- (e) Production related activities, including application of oils, greases, lubricants, and nonvolatile materials as temporary protective coatings; degreasing operations that do not exceed 145 gallons per 12 months; brazing, cutting torches, soldering and welding; and closed loop heating and cooling systems.
[326 IAC 2-7-1(21)(G)(vi)(AA),(CC),(EE)&(FF)]
- (f) Cleaners and solvents characterized as follows:
 - A) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;
 - B) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.[326 IAC 2-7-1(G)(vi)(DD)]
- (g) Noncontact cooling tower systems with either of the following:
Natural draft cooling towers not regulated under a HESHAP.
Forced and induced draft cooling tower system not regulated under a NESHAP.
[326 IAC 2-7-1(G)(ix)(FF)]
- (h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment. [326 IAC 2-7-1(21)(G)(x)(AA)]
- (i) Heat exchanger cleaning and repair. [326 IAC 2-7-1(G)(x)(BB)]
- (j) Paved and unpaved roads and parking lots with public access. [326 IAC 2-7-1(21)(G)(xiii)]
- (k) Asbestos abatement projects regulated by 326 IAC 14-10. [326 IAC 2-7-1(21)(G)(xvi)]
- (l) Routine maintenance and repair of buildings. [326 IAC 2-7-1(21)(G)(xvii)]
- (m) Flue gas conditioning systems and associated chemicals.
[326 IAC 2-7-1(21)(G)(xviii)]

- (n) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup. [326 IAC 2-7-1(21)(G)(xix)]
- (o) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower. [326 IAC 2-7-1(G)(xx)(AA)-(EE)]
- (p) On-site fire and emergency response training approved by the department. [326 IAC 2-7-1(G)(xxii)(AA)]
- (q) Emergency generators as follows:
Gasoline generators not exceeding 110 horsepower.
Diesel generators not exceeding 1600 horsepower.
Natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
[326 IAC 2-7-1(21)(G)(xxii)(BB)]
- (r) Other emergency equipment as follows:
Stationary, diesel fire pumps and rental air compressor.
[326 IAC 2-7-1(21)(G)(xxii)(CC)]
- (s) Coalescer media changeout. [326 IAC 2-7-1(21)(G)(xxv)]

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP 01639, issued on February 24, 2000
- (b) OP 01640, issued on February 24, 2000
- (c) OP 01642, issued on February 24, 2000
- (d) OP 01643, issued on February 24, 2000
- (e) OP 01645, issued on February 24, 2000
- (f) OP 01647, issued on February 24, 2000
- (g) OP 01648, issued on February 24, 2000
- (h) OP 01649, issued on February 24, 2000
- (i) OP 01650, issued on February 24, 2000
- (j) OP 01651, issued on February 24, 2000
- (k) OP 01655, issued on February 24, 2000
- (l) OP 01656, issued on February 24, 2000, modified on May 17, 2000
- (m) OP 01657, issued on February 24, 2000, modified on May 17, 2000
- (n) OP 01658, issued on February 24, 2000
- (o) OP 01659, issued on February 24, 2000
- (p) OP 01660, issued on February 24, 2000
- (q) OP 01661, issued on February 24, 2000
- (r) OP 01662, issued on February 24, 2000
- (s) OP 01663, issued on February 24, 2000
- (t) OP 01668, issued on February 24, 2000
- (u) OP 01669, issued on February 24, 2000
- (v) OP 01670, issued on February 24, 2000
- (w) OP 01671, issued on February 24, 2000
- (x) OP 01672, issued on February 24, 2000
- (y) OP 01673, issued on February 24, 2000
- (z) OP 01674, issued on February 24, 2000

- (aa) OP 01675, issued on February 24, 2000
- (bb) OP 01676, issued on February 24, 2000
- (cc) OP 01678, issued on February 24, 2000
- (dd) OP 01679, issued on February 24, 2000
- (ee) OP 01680, issued on February 24, 2000
- (ff) OP 01681, issued on February 24, 2000
- (gg) OP 01682, issued on February 24, 2000
- (hh) OP 01683, issued on February 24, 2000
- (ii) OP 01684, issued on February 24, 2000
- (jj) OP 01685, issued on February 24, 2000
- (kk) OP 01686, issued on February 24, 2000
- (ll) OP 01687, issued on February 24, 2000
- (mm) OP 01688, issued on February 24, 2000
- (nn) OP 01689, issued on February 24, 2000
- (oo) OP 01690, issued on February 24, 2000
- (pp) OP 01692, issued on February 24, 2000

All conditions from previous approvals were incorporated into this Part 70 permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 13, 1996.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Uncontrolled Potential to Emit

Pollutant	Potential To Emit (tons/year)
PM	15,913.99
PM-10	11,168.42
SO ₂	824.74
VOC	8.30
CO	62.09
NO _x	314.38

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Potential to Emit After Controls

Pollutant	Potential To Emit (tons/year)
PM	101.20
PM-10	85.50
SO ₂	774.07
VOC	8.30
CO	62.09
NO _x	314.38

- (a) The uncontrolled potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10, SO₂, and NO_x are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1999 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	12.77
PM-10	9.90
SO ₂	55.01
VOC	2.44
CO	25.97
NO _x	44.28
HAP (specify)	0

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Babcock-Wilcox Boiler #3	38.704	33.2856*	377.75	1.8905	12.03	132.33	
Babcock-Wilcox Boiler #4	38.704	*	377.75	1.8905	12.03	132.33	
American Hydrotherm Boiler #1	0.1529	0.1529	0.0306	0.2702	1.02	5.10	
American Hydrotherm Boiler #2	4.2819	3.6753	14.09	0.2702	1.78	19.63	
Powerhouse Boiler #1	5.644	5.644	4.432	3.982	35.226	24.989	
Soap Rework Grinding Process	0.8199	0.5740					
Three Soap Dryers	0.2628	0.0184					
Five Noodle Bins & One Scrap Kettle	1.879	1.3153					
Hard Soaps Finishing Lines 1, 2, and 3	1.237	0.8661					
Hard Soaps Finishing Lines 5, 7 and 8	1.237	0.8661					
Soap Noodle Bin No. 1 DC System	0.451	0.3158					
Soap Noodle Bin No. 2 DC System	0.451	0.3158					
Soap Noodle Bin No. 3 DC System	0.451	0.3158					
Chip Mixer No. 1	0.451	0.3158					
Chip Mixer No. 2	0.451	**					
Chip Mixer Nos. 3 & 4	0.451	**					
Powder Dye Mixing System	0.0044	0.0031					
ZnO Catalyst Weigh Station	0.092	0.0644					
Detergent Bar Soap Milling & Pelletizing	3.451	2.4160					
Three Chill Rolls & Apron Conveyors	1.226	0.8585					
Flex Kleen DC System-1053	0.026	0.0184					
Flex Kleen DC System-1054	0.026	0.0184					
Flex Kleen DC System-1055	0.026	0.0184					
Flex Kleen DC System-1056	0.026	0.0184					
Flex Kleen DC System-1052	0.035	0.0245					
Flex Kleen DC System-1051	0.031	0.0219					
Sample Detergent Bar Soap Line	0.009	0.006					
No. 1 & No. 2 Noodle Bins	0.026	0.0184					
Unit 17 controlled by Schneible Wet Scrubber System	0.1106	0.0766					
Unit 30 controlled by Schneible Wet Scrubber System	0.3321	0.2325					
Soap Dryer/Cleanout System Tank No. 1	0.011	0.0110					
Soap Dryer/Cleanout System Tank No. 2	0.038	0.0377					
Storage Tank No. 26				0.000409			
Storage Tank No. 28				0.000409			
Fuel Oil Day Tank				0.000113			
Sulfonation Process	0.0101	0.0071	0.0051				
Preservative Addition System	0.0876	0.0745					
Total Emissions	101.20	85.50	774.06	8.30	62.09	314.38	0.0

*Combined limit for Boilers 3 & 4

** Combined limit for Chip Mixer Nos. 1, 2, 3 & 4

County Attainment Status

The source is located Lake County.

Pollutant	Status
PM-10	Moderate Nonattainment
SO ₂	Primary Nonattainment
NO ₂	Unclassifiable/Attainment
Ozone	Severe Nonattainment
CO	Unclassifiable/Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe nonattainment for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) The source is located in the area of Lake County that has been classified as moderate nonattainment for PM-10 and primary nonattainment for SO₂. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) The Powerhouse Boiler No. 1 (Unit 49) is subject to 40 CFR Part 60 Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. This rule limits the sulfur dioxide emissions to five-tenths (0.5) pounds per million Btu heat input and 90% reduction in SO₂ emissions; five-hundredths (0.05) pound PM per million Btu (MMBtu) heat input; twenty percent (20%) opacity except for one six-minute period per hour of not more than twenty-seven (27%) opacity; and two-tenths (0.20) pound NO_x per million Btu (MMBtu) heat input.

Compliance with this limitation shall satisfy the PM and SO₂ requirements of 326 IAC 6-1 and 326 IAC 7-1.1, respectively.

- (b) The Babcock Wilcox Boilers No. 3 and 4 (Units 2 and 3) and the American Hydrotherm Boilers No. 1 and 2 (Units 16 and 29) are not subject to 40 CFR Part 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units because they were constructed prior to the applicability date of June 9, 1989.
- (c) The Storage Tanks No. 26, 28 & the Fuel Oil Day Tank (Units 62, 63, & 64) are not subject to 40 CFR Part 60 Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for which construction, reconstruction or modification commenced after June 11, 1973, and prior to May 19, 1978, because Units 62 & 63 were constructed in 1930, Unit 62 was constructed in 2001, and none have been reconstructed or modified.
- (d) The Storage Tanks No. 26, 28, & the Fuel Oil Day Tank (Units 62, 63, & 64) are not subject to 40 CFR Part 60 Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for which construction, reconstruction, or modification commenced after May 18, 1978 and prior to July 23, 1984, because Units 62 & 63 were constructed in 1930, Unit 64 was constructed in 2001, and none have been reconstructed or modified.
- (e) The Storage Tanks No. 26, 28, & the Fuel Oil Day Tank (Units 62, 63, & 64) are not subject to 40 CFR Part 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for which construction, reconstruction, or modification commenced after July 23, 1984, because Units 62 & 63 were constructed in 1930 and have not been reconstructed or modified. Unit 64 was constructed in 2001, but has a design capacity less than 75 m³ (19,800 gallons) and is therefore exempt from the General Provisions (part 60, subpart A) and from the provisions of this subpart.
- (f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.
- (g) The degreasing operations are not subject to the 40 CFR Part 63 Subpart T, National Emission Standards for Halogenated Solvent Cleaning because the solvents used in the degreasing operations are not any of the listed regulated solvents.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

The source has submitted an Emergency Reduction Plan (ERP) on January 2, 2001. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has submitted a Preventive Maintenance Plan (PMP) on March 18, 1997. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Lake County and has the potential to emit more than ten (10) tons per year of NO_x. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

The source is in compliance with the required emission statement submittals.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

No violations of the opacity standards have been observed at this source.

326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements)

Pursuant to this rule, the Permittee shall be in violation if the opacity of fugitive particulate emissions exceeds ten percent (10%).

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

Pursuant to this rule, the Permittee shall comply with the applicable provisions of 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures).

State Rule Applicability - Individual Facilities

326 IAC 6-1-2 (Particulate Matter (PM) Nonattainment Area Limitations)

Pursuant to 326 IAC 6-1-1, Applicability, no emission unit is subject to 326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations) because these emission units are listed in 326 IAC 6-1-10.1 (Lake County PM10 emission requirements).

326 IAC 6-1-10.1 (Particulate Matter less than 10 microns (PM10) Lake County Rule)

Pursuant to 6-1-10.1(h) the American Hydrotherm Boiler No. 1, Unit 16, shall fire natural gas only and shall not exceed 0.003 pounds per MMBtu heat input rate or 0.040 pounds per hour while combusting fuel.

Pursuant to 326 IAC 6-1-10.1(d), the PM10 and PM from the Sulfonation Process, Unit 4, shall not exceed 0.205 pounds per ton of material processed or 0.390 pounds per hour.

Pursuant to 326 IAC 6-1-10.1(d), the PM10 and PM emission limitations for the boilers are established as follows:

Emission Unit Description	Emission Unit ID #	Emission Limit (lbs/MMBtu)	Emission Limit (lbs/hr)
Babcock & Wilcox Boilers #3 & #4	2 & 3	0.116*	18.88*
American Hydrotherm Boiler No. 2	29	0.150	1.830

*Combined limit for Boilers #3 & 4 exhausting to Stack 2.

Pursuant to 326 IAC 6-1-10.1(d), the PM10 and PM emission limitations for the facilities controlled by dust collections systems are established as follows:

Emission Unit Description	Emission Unit ID #	Emission Limit (gr/dscf)	Emission Limit (lbs/hr)
Soap Rework Grinding Process	11	0.020	0.250
Three (3) Vacuum System Soap Dryers	12	0.020	0.120
Five (5) Noodles Bins and One (1) Scrap Soap Kettle	13	0.020	0.860
Hard Soaps Finishing Lines No. 1, 2 and 3	14	0.020*	1.540*
Hard Soaps Finishing Lines No. 5, 7, and 8	15	0.020*	1.540*
Soap Noodle Bin No. 1 Dust Collection System	18	0.020	0.210
Soap Noodle Bin No. 2 Dust Collection System	19	0.020	0.210
Soap Noodle Bin No. 3 Dust Collection System	20	0.020	0.210
Chip Mixer No. 1	21	0.020**	0.720**
Chip Mixer No. 2	22	0.020**	0.720**
Chip Mixer No. 3 and 4	23	0.020**	0.720**
Powder Dye Mixing System	24	0.020	0.130
Zinc Oxide Catalyst Weight Station and Three Apron Conveyors Drives	25	0.020	0.800
Detergent Bar Soap Facility Milling and Pelletizing	26	0.020	1.03
Three (3) Chill Rolls and Apron Conveyors	27	0.020	1.090
Flex-Kleen Dust Collector System (DC-1053)	31	0.020	0.940
Flex-Kleen Dust Collector System (DC-1054)	32	0.020	0.940
Flex-Kleen Dust Collector System (DC-1055)	33	0.020	0.940
Flex-Kleen Dust Collector System (DC-1056)	34	0.020	0.940
Flex-Kleen Dust Collector System (DC-1052)	35	0.020	2.130
Flex-Kleen Dust Collector System (DC-1051)	36	0.020	2.130
Sample Detergent Bar Soap Line	45	0.002***	0.002

*Combined limit for Units 14 and 15, exhausting to Stacks 16 and 17

**Combined limit for Units 21, 22 and 23, exhausting to Stack 23

***Emission limitation units are lbs/ton

Pursuant to 326 IAC 6-1-10.1(d), the PM10 and PM from the manufacturing emission units shall not exceed the following emission limitations:

Emission Unit Description	Emission Unit ID #	Emission Limit (gr/dscf)	Emission Limit (lbs/hr)
Schneible Wet Scrubber controlling seven (7) liquid "Drais" mixers, two (2) reactors, and two (2) strippers	30	0.030	1.030
Schneible Wet Scrubber controlling three (3) liquid "Drais" mixers, two (2) reactors, and (2) two strippers	17	0.030	1.030
Soap Dryer/Cleanout System Tank No. 1	46	0.030	0.390
Soap Dryer/Cleanout System Tank No. 2	47	0.030	0.300

326 IAC 6-1-10.1(l) (Continuous Compliance Plan)

Pursuant to 326 IAC 6-1-10.1(l) (Lake County PM10 Emission Requirements), the Permittee shall submit to IDEM-OAQ and HDEM, and maintain at the source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring, and record keeping requirements as specified in 326 IAC 6-1-10.1(p) through (r) or according to the Permittee's CCP. The source has submitted a CCP on September 16, 1996. The CCP has been verified to fulfill the requirements of 326 IAC 6-1-10.1(l) (Continuous Compliance Plan).

326 IAC 6-2 Particulate Emission Limitations for Sources of Indirect Heating

Units No. 2, 3, 16 and 29 are not subject to the emission limitations found at 326 IAC 6-2 since more stringent PM and PM10 emission limitations are established in 326 IAC 6-1-10.1. Additionally, the Powerhouse Boiler No. 1, Unit 49, meets the emission limitations of 326 IAC 6-2 by complying with the more stringent local limits. The following calculations show the emission limitations found at 326 IAC 6-2. These calculations are provided as a comparison to demonstrate that the local limits and the emission limitations under 326 IAC 6-1 are more stringent.

As per 326 IAC 6-2-2 (Emission Limitations for Facilities Specified in 326 IAC 6-2-1(b)), the boilers constructed prior to 1983, Units No. 2 and 3, would each be limited to the pounds per million British thermal unit, as shown in the following table:

Boiler	Installation Date	Heat Input Rating (mmBtu/hr)	Emissions Limitation (lb/mmBtu)
Babcock-Wilcox Boiler #3 (Unit 2)	1932	82.4	0.4295
Babcock-Wilcox Boiler #4 (Unit 3)	1936	82.4	0.3844

$$Q = 164.8$$

This emission limitation was based on the following equation:

$$Pt = 0.87 / Q^{0.16}$$

Where:

Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBTU/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

As per 326 IAC 6-2-4 (Emission Limitations for Facilities Specified in 326 IAC 6-2-1(d)), the boilers constructed after 1983, Units No. 16, 29 and 49, would each be limited to the pounds per million British thermal unit, as shown in the following table:

Boiler	Installation Date	Heat Input Rating (mmBtu/hr)	Emissions Limitation (lb/mmBtu)
American Hydrotherm Boiler #1 (Unit 16)	1985	12.2	0.2838
American Hydrotherm Boiler #2 (Unit 29)	1989	12.2	0.2789
Powerhouse Boiler No. 1 (Unit 49)	1995	120	0.2455

$$Q = 309.2$$

This emission limitation was based on the following equation:

$$Pt = 1.09/Q^{0.26}$$

Where:

Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBTU/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

326 IAC 7-4-1 Sulfur Dioxide (SO₂) [Lake County Sulfur Dioxide Emission Limitations]

Pursuant to 326 IAC 7-4-1.1(a) (SO₂ Emissions Limitations), the SO₂ emissions from American Hydrotherm Boiler No. 2 shall not exceed three-tenths (0.3) pound per million Btu (lb/MMBtu) heat input while combusting fuel oil.

Pursuant to 326 IAC 7-4-1.1(c)(13) (SO₂ Emissions Limitations), the following boilers shall not exceed the SO₂ emissions in pounds per million Btu:

Emission Unit Description	Emission Unit ID #	SO ₂ Emission Limit (lbs/mmBtu)
Babcock & Wilcox Boiler #3	2	1.52
Babcock & Wilcox Boiler #4	3	1.52

Pursuant to 326 IAC 7-4-1.1(c)(13) (SO₂ Emissions Limitations), the SO₂ emissions from the Sulfonation Process shall not exceed 3.1 pounds per ton of material processed or 10.075 pounds per hour.

326 IAC 8-3-2 (Cold Cleaner Operations)

The insignificant degreasing operations shall be in compliance with these requirements by complying with 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control).

326 IAC 8-3-5 (Cold Cleaner Operation and Control)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility existing as of July 1, 1990, shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight (38) degrees Celsius (one hundred (100) degrees Fahrenheit);
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight (38) degrees Celsius (one hundred (100) degrees Fahrenheit), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight (38) degrees Celsius (one hundred (100) degrees Fahrenheit), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

- (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility existing as of July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

The three (3) above ground storage tanks are only subject to the record keeping requirements of 326 IAC 8-9-6(a) and (b) because each of their vapor pressures are less than 0.5 psia. Pursuant to 326 IAC 8-9-6, the Permittee shall keep the following records for the life of the vessel:

- a. The vessel identification number.
- b. The vessel dimensions.
- c. The vessel capacity.

Local Rule Applicability - Individual Facilities

Hammond Air Quality Control Ordinance No. 3522 (as amended)

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the PM emissions from the following emission units shall not exceed the pounds per hour emission rates listed below:

Emission Unit Description	Emission Unit ID #	PM Emission Limit (lbs/hr)	PM Emission Limit (tons/year)
ZnO Catalyst Weigh Station	25	0.021	0.092
Detergent Bar Soap Facility Milling and Pelletizing	26	0.79	3.45
No. 1 & No. 2 Noodle Bins	48	0.006	0.0263
Powerhouse Boiler No. 1	49	5.521	6.2968
Preservative Addition System	50	0.020	0.088

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the PM₁₀ emissions from the following emission units shall not exceed the pounds per hour emission rates listed below:

Emission Unit Description	Emission Unit ID #	PM ₁₀ Emission Limit (lbs/hr)	PM ₁₀ Emission Limit (tons/year)
No. 1 & No. 2 Noodle Bins	48	0.0042	0.0184
Powerhouse Boiler No. 1	49	5.521	6.2968
Preservative Addition System	50	0.017	0.0745

Pursuant to the Hammond Air Quality Control Ordinance No. 3522 (as amended), the maximum sulfur content by weight of the fuel oil burned in the boilers shall be limited as follows:

Emission Unit Description	Emission Unit ID #	Maximum Sulfur Content by Weight
Babcock-Wilcox Boiler #3	2	1.43%
Babcock-Wilcox Boiler #4	3	1.43%
American Hydrotherm Boiler #2	29	0.25%
Powerhouse Boiler No. 1	49	0.096%

Testing Requirements

Within 36 months after issuance of this permit, a performance test shall be conducted for Units 11, 12, 13, 14, 18, 21, 22, 23, 26, and 27 in order to demonstrate compliance with PM₁₀ emissions limits. The Permittee shall perform PM-10 testing utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensable PM-10.

The calculated PM₁₀ emissions and the PM₁₀ regulatory limits are shown in the table below (calculations attached).

Process/facility	PM-10 calculated (lb/hour)	PM-10 regulatory limit (lb/hour)
Babcock-Wilcox Boiler #3	7.5995	18.88*
Babcock-Wilcox Boiler #4	7.5995	*
American Hydrotherm Boiler #1	0.0349	0.040
American Hydrotherm Boiler #2	0.8391	1.830
Powerhouse Boiler #1	6.8794	6.8794
Soap Rework Grinding Process	0.1310	0.250
Three Soap Dryers	0.0042	0.120
Five Noodle Bins & One Scrap Kettle	0.3003	0.860
Hard Soaps Finishing Lines 1, 2, and 3	0.1977	1.540
Hard Soaps Finishing Lines 5, 7 and 8	0.1977	1.540
Soap Noodle Bin No. 1 DC System	0.0721	0.210
Soap Noodle Bin No. 2 DC System	0.0721	0.210
Soap Noodle Bin No. 3 DC System	0.0721	0.210
Chip Mixer No. 1	0.0721**	0.720**
Chip Mixer No. 2	0.0721**	0.720**
Chip Mixer Nos. 3 & 4	0.0721**	0.720**
ZnO Catalyst Weigh Station	0.0147	0.800
Powder Dye Mixing System	0.0007	0.130
Detergent Bar Soap Milling & Pelletizing	0.5516	1.03
Three Chill Rolls & Apron Conveyors	0.1960	1.09
Flex Kleen DC System-1053	0.0042	0.940
Flex Kleen DC System-1054	0.0042	0.940
Flex Kleen DC System-1055	0.0042	0.940
Flex Kleen DC System-1056	0.0042	0.940
Flex Kleen DC System-1052	0.0056	2.130
Flex Kleen DC System-1051	0.0050	2.130
Sample Detergent Bar Soap Line	0.0014	0.002
No. 1 & No. 2 Noodle Bins	0.0042	0.0042
Unit 17 controlled by Schneible Wet Scrubber System	0.0175	1.030
Unit 30 controlled by Schneible Wet Scrubber System	0.0531	1.030
Soap Dryer/Cleanout System Tank No. 1	0.0025	0.390
Soap Dryer/Cleanout System Tank No. 2	0.0086	0.300
Sulfonation Process	0.0016	0.390
Preservative Addition System	0.0170	0.0170

*Combined for Boilers 3 & 4

**Combined limit for Units 21, 22 and 23, exhausting to Stack 23

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM-OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. Visible Emission Notations

Visible emission notations of the Emission Units 2, 3, 4, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 45, 46, 47, 48, and 49 stacks exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

Visible emission notations of the Emission Units 2, 3, 29, and 49 stacks exhaust shall be performed once per shift during normal daylight operations while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.

- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (c) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (d) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

2. Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the Emission Units 11, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 31, 32, 33, 34, 35, 36, 45, and 48 at least once weekly when the equipment is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 5.0 inches of water, or a range established during the latest stack test. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above-mentioned range for any one reading.

The Permittee shall record the flow rate and total static pressure drop across each scrubber used in conjunction with Units 4, 17, and 30 at least once daily when in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the scrubbers shall be maintained with the range of 1.0 and 5.0 inches of water, or a range established during the latest stack test. The Compliance Response Plan for these units shall contain troubleshooting and response steps for when the amperage is outside of the normal range as recommended by the manufacturer.

The Permittee shall monitor the amperage on the fan motor of the electrostatic precipitator used in conjunction with the Sulfonation Process, at least once daily when the process is in operation. The Compliance Response Plan for these units shall contain troubleshooting and response steps for when the amperage is outside of the normal range as recommended by the manufacturer.

3. Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling Emission Units 11, 12, 13, 14, 15, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 31, 32, 33, 34, 35, 36, 45 and 48 when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

4. Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments shall be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process shall be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

5. Scrubber Inspections

An inspection shall be performed each calendar quarter of the scrubbers controlling Units 4, 17 and 30. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.

6. Demister Inspections

An inspection shall be performed each calendar quarter of the demister controlling the Sulfonation Process. Defective part(s) shall be replaced. A record shall be kept of the results of the inspection and the number of scrubber part(s) replaced.

7. Preventive Inspections

- (a) The following Powerhouse Boiler No. 1 inspections shall be performed at least once every two years in accordance with the Preventive Maintenance Plan to be prepared in accordance with Section B – Preventive Maintenance Plan:
 - (1) Start-up and shutdown practices; and
 - (2) Spare parts availability.
- (b) Inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken with the past twelve months.
- (c) Appropriate response steps for any discrepancies in the above list found during the inspection shall be taken in accordance with Section C – Compliance Monitoring Plan – Failure to Take Response Steps.

These monitoring conditions are necessary because the control devices must operate properly to ensure compliance with 326 IAC 6-1-10.1 (Lake County PM₁₀ Emission Requirements), 326 IAC 7-4-1 (Lake County Sulfur Dioxide (SO₂) Emission Limitations) and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the 1990 Clean Air Act. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Part 70 Application Form GSD-08.

None of the listed air toxics will be emitted from this source.

Conclusion

The operation of this soap manufacturing plant shall be subject to the conditions of the attached proposed Part 70 Permit No. T089-6623-00229.

Appendix A: Source Emissions Calculations

Conopco, Inc. d/b/a Unilever HPC USA
1200 CALUMET AVENUE
HAMMOND, IN 46320

PLANT ID NO: 0229
INSP DATE: 9/27&28/00
CALC DATE: 8/21/01

CALCULATIONS BY: Kristina Hansen

YEAR OF DATA: 1999

NO. OF POINTS: 38

REVISED BY: Debra Malone (1/16/01)

NO. OF SEGMENTS: 42

Debra Malone (5/16/01) updated E.F.

****NOTES****

EF: EMISSION FACTOR

MDR: MAXIMUM DESIGN RATE

Ts: STACK DISCHARGE TEMPERATURE

CE: CONTROL EFFICIENCY

MDC: MAXIMUM DESIGN CAPACITY

UNITS FOR EMISSIONS ARE IN (TPY) EXCEPT WHERE GIVEN

P1; S1: BOILER #2 (Babcock & Wilcox) (Stack 1); Facility Closed

P2; S1: BOILER #3 (Babcock & Wilcox) MDC (mmBtu/hr): 82.4 HEAT CONTENT (Btu/cft): 1,050 STACK ID (DIAM:HEIGHT): 7' : 153'
(Natural Gas Combustion) MDR (mmcf/hr): 0.0785 QTY BURNED (mmcf/yr): 59.00 FLOWRATE (ACFM): 53,000
Stack 2, Bldg. 8 Ts(°F): 450

CNTRL DEV: NONE

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 1-02-006-02			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(lbs/mmcf)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	7.6	0	0.5964	14.3141	2.6123	0.5964	2.6123	0.0023	See Below	See Below	0.2242	0.2242
PM10	3	0	0.2354	5.6503	1.0312	0.2354	1.0312	0.0009	See Below	See Below	0.0885	0.0885
SOx	0.6	0	0.0471	1.1301	0.2062	0.0471	0.2062	N/A	See Below	See Below	0.0177	0.0177
NOx	100	0	7.8476	188.3429	34.3726	7.8476	34.3726	N/A	See Below	See Below	2.9500	2.9500
VOC	5.5	0	0.4316	10.3589	1.8905	0.4316	1.8905	N/A	See Below	See Below	0.1623	0.1623
CO	84	0	6.5920	158.2080	28.8730	6.5920	28.8730	N/A	See Below	See Below	2.4780	2.4780
LEAD	0.0005	0	0.0000	0.0009	0.0002	0.0000	0.0002	N/A	0	0.0000	0.0000	0.0000

P2; S2: BOILER #3 (Babcock & Wilcox) MDC (mmBtu/hr): 82.4 HEAT CONTENT (Btu/gal): 150,000 STACK ID (DIAM:HEIGHT): 7' : 153'
(No. 6 Fuel Oil Combustion) MDR (mgal/hr): 0.5493 ASH CONTENT (%): FLOWRATE (ACFM): 53,000
Stack 2, Bldg. 8 QTY BURNED (mgal/yr): 0.00 SULFUR CONTENT (%): 1.43 Ts(°F): 450

CNTRL DEV: NONE

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 1-02-004-02			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(lbs/mgal)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	16.086	0	8.8366	212.0778	38.7042	8.8366	38.7042	0.0334	See Below	See Below	0.0000	0.0000
PM10	13.834	0	7.5995	182.3869	33.2856	7.5995	33.2856	0.0287	See Below	See Below	0.0000	0.0000
SOx	157	0	86.2453	2,069.8880	377.7546	86.2453	377.7546	N/A	See Below	See Below	0.0000	0.0000
NOx	55	0	30.2133	725.1200	132.3344	30.2133	132.3344	N/A	See Below	See Below	0.0000	0.0000
VOC	0.28	0	0.4316	10.3589	1.8905	0.4316	1.8905	N/A	See Below	See Below	0.0000	0.0000
CO	5	0	2.7467	65.9200	12.0304	2.7467	12.0304	N/A	See Below	See Below	0.0000	0.0000
LEAD	0.0124	0	0.0068	0.1635	0.0298	0.0068	0.0298	N/A	See Below	See Below	0.0000	0.0000

Sub-Totals for Boiler #3

Gas Totals for Boiler #5										
POTENTIAL EMISSIONS							ALLOWABLE		COMPANY ACTUAL	
BEFORE CONTROLS				AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	8.8366	212.0778	38.7042	8.8366	38.7042	0.0334	18.88	82.6944	0.2242	0.2242
PM10	7.5995	182.3869	33.2856	7.5995	33.2856	0.0287			0.0885	0.0885
SOx	86.2453	2,069.8880	377.7546	86.2453	377.7546	N/A			0.0177	0.0177
NOx	30.2133	725.1200	132.3344	30.2133	132.3344	N/A			2.9500	2.9500
VOC	0.4316	10.3589	1.8905	0.4316	1.8905	N/A			0.1623	0.1623
CO	2.7467	65.9200	12.0304	2.7467	12.0304	N/A			2.4780	2.4780
LEAD	0.0068	0.1635	0.0298	0.0068	0.0298	N/A			0.0000	0.0000

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

* Combined PM10 limit for Boilers 3 & 4.

SO2: 326 IAC 7-4-1.1(c)(13)

P3; S1: BOILER #4 (Babcock & Wilcox)
(Natural Gas Combustion)
Stack 2, Bldg. 8

MDC (mmBtu/hr): 82.4
MDR (mmcf/hr): 0.0785

HEAT CONTENT (Btu/cft): 1,050
QTY BURNED (mmcf/yr): 225.00

STACK ID (DIAM:HEIGHT): 7' : 153'
FLOWRATE (ACFM): 53,000
Ts(°F): 450

CNTRL DEV: NONE

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 1-02-006-02			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
			POLLUTANT	EF (lbs/mmcf)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)
PM	7.6	0	0.5964	14.3141	2.6123	0.5964	2.6123	0.0023	See Below	See Below	0.8550	0.8550
PM10	3	0	0.2354	5.6503	1.0312	0.2354	1.0312	0.0009	See Below	See Below	0.3375	0.3375
SOx	0.6	0	0.0471	1.1301	0.2062	0.0471	0.2062	N/A	See Below	See Below	0.0675	0.0675
NOx	100	0	7.8476	188.3429	34.3726	7.8476	34.3726	N/A	See Below	See Below	11.2500	11.2500
VOC	5.5	0	0.4316	10.3589	1.8905	0.4316	1.8905	N/A	See Below	See Below	0.6188	0.6188
CO	84	0	6.5920	158.2080	28.8730	6.5920	28.8730	N/A	See Below	See Below	9.4500	9.4500
LEAD	0.0005	0	0.0000	0.0009	0.0002	0.0000	0.0002	N/A	0	0.0000	0.0001	0.0001

P3; S2: BOILER #4 (Babcock & Wilcox)
(No. 6 Fuel Oil Combustion)
Stack 2, Bldg. 8

MDC (mmBtu/hr): 82.4
MDR (mgal/hr): 0.5493
QTY BURNED (mgal/yr): 698.00

HEAT CONTENT (Btu/gal): 150,000
ASH CONTENT (%):
SULFUR CONTENT (%): 1.43

STACK ID (DIAM:HEIGHT): 7' : 153'
FLOWRATE (ACFM): 53,000
Ts(°F): 450

CNTRL DEV: NONE

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 1-02-004-02			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(lbs/mgal)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	16.086	0	8.8366	212.0778	38.7042	8.8366	38.7042	0.0334	See Below	See Below	5.6140	5.6140
PM10	13.834	0	7.5995	182.3869	33.2856	7.5995	33.2856	0.0287	See Below	See Below	4.8281	4.8281
SOx	157	0	86.2453	2,069.8880	377.7546	86.2453	377.7546	N/A	See Below	See Below	54.7930	54.7930
NOx	55	0	30.2133	725.1200	132.3344	30.2133	132.3344	N/A	See Below	See Below	19.1950	19.1950
VOC	0.28	0	0.1538	3.6915	0.6737	0.1538	0.6737	N/A	See Below	See Below	0.0977	0.0977
CO	5	0	2.7467	65.9200	12.0304	2.7467	12.0304	N/A	See Below	See Below	1.7450	1.7450
LEAD	0.0124	0	0.0068	0.1635	0.0298	0.0068	0.0298	N/A	See Below	See Below	0.0043	0.0043

Sub-Totals for Boiler #4

POLLUTANT	POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
	BEFORE CONTROLS			AFTER CONTROLS			(lbs/hr)	(TPY)	BEFORE CONTROLS	AFTER CONTROLS
	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)				
PM	8.8366	212.0778	38.7042	8.8366	38.7042	0.0334	18.88	82.6944	6.4690	6.4690
PM10	7.5995	182.3869	33.2856	7.5995	33.2856	0.0287			5.1656	5.1656
SOx	86.2453	2,069.8880	377.7546	86.2453	377.7546	N/A			54.8605	54.8605
NOx	30.2133	725.1200	132.3344	30.2133	132.3344	N/A			30.4450	30.4450
VOC	0.4316	10.3589	1.8905	0.4316	1.8905	N/A			0.7165	0.7165
CO	2.7467	65.9200	12.0304	2.7467	12.0304	N/A			11.1950	11.1950
LEAD	0.0068	0.1635	0.0298	0.0068	0.0298	N/A			0.0044	0.0044

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

* Combined PM10 limit for Boilers 3 & 4.

**Potential emissions before and after controls for Boiler #3 are set equal to that of Boiler #4.

SO2: 326 IAC 7-4-1.1(c)(13)

P4; S1: Sulfonation Process
Stack 4, Bldg. 10

*MDR (T/hr): 3.25
YEARLY PROD (T/yr): 20,219

STACK ID (DIAM:HEIGHT): 2' : 64'

FLOWRATE (ACFM): 2,620

CNTRL DEV: Scrubber - 99% CE for SO2

Ts(°F): 120

ESP/99.9% & Dmstr/99.596% for TSP

PERMITTED OPERATING HRS: 8760 hr/yr

stack test - 9/12/89

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
POLLUTANT	EF(LB/T)	CE (%)	BEFORE CONTROLS			AFTER CONTROLS			(lbs/hr)	(TPY)	BEFORE CONTROLS	AFTER CONTROLS
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)				
PM	7.11	0.99990	23.1214	554.9143	101.2719	0.0023	0.0101	0.0001	0	0.0000	71.9219	0.00719
PM10	4.98	0.99990	16.1850	388.4400	70.8903	0.0016	0.0071	0.0001	0.390	1.7082	50.3453	0.00503
SOx	3.56	0.99990	11.5700	277.6800	50.6766	0.0012	0.0051	N/A	10.0750	44.1285	35.9898	0.00360
NOx	0	0.00000	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.00000
VOC	0	0.00000	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.00000
CO	0	0.00000	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.00000
LEAD	0	0.00000	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.00000

*THIS POINT IS CLASSED "REGISTERED" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

SO2: 326 IAC 7-4-1.1(c)(13)

* Per Company (2/19/99), maximum production rate is 6,500 lbs/hr; 3.25 T/hr.

H2SO4 mist: Hammond Air Qual. Cont. Ord. No. 3522

0.052 lbs/hr and 0.228 TPY

P5; S1: Defi Process Dowtherm Furnace (Stack 5); Facility Closed

P6; S1: Oil Refinery - Filter Aid Dumping Operation #1 (Stack 6); Facility Closed

P7; S1: Detergent Bar Soap Mfg. Process #1 (Stack 7); Facility Closed

P8; S1: Industrial Bulk (High Titer Granules & Chips Mfg.) (Stack 8); Facility Closed

P9; S1: Bulk Filtrol (Bleaching Earth) Unloading (Stack 10); Facility Closed

P10; S1: Crude Glycerine Filter Aid DC System

P11; S1: Soap Rework Grinding DC System
Stack 13, Bldg 14

MDR (T/hr): 2.08
YEARLY PROD (T/yr): 1,595.00

STACK ID (DIAM:HEIGHT): 0.67' : 63'
FLOWRATE (ACFM): 1,500

CNTRL DEV: Shick Auto-Jet DC (99.9% CE)

Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
			POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)
PM	90	0.999	187.2000	4,492.8000	819.9360	0.1872	0.8199	0.0146	0	0.0000	71.7750	0.0718
PM10	63	0.999	131.0400	3,144.9600	573.9552	0.1310	0.5740	0.0102	0.250	1.0950	50.2425	0.0502
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

*E.F. FOUND IN REVIEW - SOAP REWORK GRINDING PROCESS - 11/28/86.

P12; S1: Three (3) Soap Dryers DC System
Stack 14, Bldg. 14
CNTRL DEV: Hi Eff Cyclone (99.99% CE) +
Torit Bag Collector (99.99% CE)

MDR (T/hr): 14.357
YEARLY PROD (T/yr): 15,947

STACK ID (DIAM:HEIGHT): 0.5' : 58'
FLOWRATE (ACFM): 700
Ts(°F): 77

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	41.79	0.99990	600.0000	14,400.00	2,628.0000	0.0600	0.2628	0.0101	0	0.0000	333.2358	0.033324
PM10	29.26	0.99999	420.0000	10,080.00	1,839.6000	0.0042	0.0184	0.0007	0.120	0.5256	233.2651	0.002333
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.000000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.000000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.000000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.000000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

*E.F. = ACTUAL EMISSION (0.06)/(1-CE)/MDR(T/HR)--FOUND IN LEVER BROTHERS BOOK #3.

P13; S1: Five (5) Noodle Bins &
One (1) Scrap Soap Kettle DC Sys
Stack 15, Bldg 14

MDR (T/hr): 16.44
YEARLY PROD (T/yr): 13,010

STACK ID (DIAM:HEIGHT): 1.0' : 60'
FLOWRATE (ACFM): 5,000
Ts(°F): 77

CNTRL DEV: AMERICAN AIR FILTER
BAG COLLECTOR (99.9% CE)

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	26	0.999	429.0000	10,296.00	1,879.0200	0.4290	1.8790	0.0101	0	0.0000	169.7473	0.1697
PM10	18.27	0.999	300.3000	7,207.20	1,315.3140	0.3003	1.3153	0.0071	0.860	3.7668	118.8231	0.1188
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

*E.F. = (0.429)/(1-CE)/MDR(T/HR)--FOUND IN LEVER BROTHERS BOOK #3.

P14; S1: Hard Soaps Finishing Lines 1, 2, & 3
Stack 16, Bldg. 14
CNTRL DEV: Seneca Dust Collector, (3) @ 99.9%

MDR (T/hr): 14.713
YEARLY PROD (T/yr): 3,250

STACK ID (DIAM:HEIGHT): 1.33' : 89'
FLOWRATE (ACFM): 4,500
Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	19.2	0.999	282.4800	6,779.52	1,237.2624	0.2825	1.2373	0.0073	0	0.0000	31.2000	0.0312
PM10	13.44	0.999	197.7360	4,745.66	866.0837	0.1977	0.8661	0.0051	1.540	6.7452	21.8400	0.0218
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

* Combined limit for Stacks 16 & 17.

*EF - SEE REVIEW - INSTALLATION OF HARD SOAP FINISH PROCESS DUST COLLECTION SYSTEM NO. 1, 2, & 3.

P15; S1: Hard Soaps Finishing Lines 5, 7, & 8
Stack 17, Bldg. 14
CNTRL DEV: Seneca Dust Collector, (3) @ 99.9%

MDR (T/hr): 14.713
YEARLY PROD (T/yr): 17,647

STACK ID (DIAM:HEIGHT): 1.33' : 89'
FLOWRATE (ACFM): 4,500
Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	19.2	0.999	282.4800	6,779.52	1,237.2624	0.2825	1.2373	0.0073	0	0.0000	169.4112	0.1694
PM10	13.44	0.999	197.7360	4,745.66	866.0837	0.1977	0.8661	0.0051	1.540	6.7452	118.5878	0.1186
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

* Combined limit for Stacks 16 & 17.

*EF - SEE REVIEW - INSTALLATION OF HARD SOAP FINISH PROCESS DUST COLLECTION SYSTEM NO. 5, 7, & 8.

P16; S1: American Hydrotherm Heater #1 MDC (mmBtu/hr): 12.22 HEAT CONTENT (Btu/cft): 1.050 STACK ID (DIAM:HEIGHT): 2.67':109.3'
(Natural Gas Combustion) MDR (mmcft/hr): 0.0116 QTY BURNED (mmcft/yr): 37.000 FLOWRATE (ACFM): 4,162
Stack 18, Bldg. 15 Ts(°F): 361

CNTRL DEV: NONE SCC NO. 3-90-006-89			PERMITTED OPERATING HRS: 8760 hr/yr							ALLOWABLE		COMPANY ACTUAL	
			POTENTIAL EMISSIONS										
			BEFORE CONTROLS			AFTER CONTROLS							
POLLUTANT	EF(lbs/mmcf)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	BEFORE CONTROLS	AFTER CONTROLS	
PM	3	0	0.0349	0.8379	0.1529	0.0349	0.1529	0.0015	0	0.0000	0.0555	0.0555	
PM10	3	0	0.0349	0.8379	0.1529	0.0349	0.1529	0.0015	0.040	0.1752	0.0555	0.0555	
SOx	0.6	0	0.0070	0.1676	0.0306	0.0070	0.0306	N/A	0	0.0000	0.0111	0.0111	
NOx	100	0	1.1638	27.9314	5.0975	1.1638	5.0975	N/A	0	0.0000	1.8500	1.8500	
VOC	5.3	0	0.0617	1.4804	0.2702	0.0617	0.2702	N/A	0	0.0000	0.0981	0.0981	
CO	84	0	0.9776	23.4624	4.2819	0.9776	4.2819	N/A	0	0.0000	1.5540	1.5540	
LEAD	0.0005	0	0.0000	0.0001	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000	

Applicable Reg: PM10: 326 IAC 6-1-10.1(h)

P17; S1: Schneible Wet Scrubber & Demister MDR (T/hr): 2.525 STACK ID (DIAM:HEIGHT): 1.16' : 101'
Stack 19, Bldg. 15 YEARLY PROD (T/yr): 14,425 FLOWRATE (ACFM): 4,000
Ts(°F): 70

SCC NO. 3-01-009-99			PERMITTED OPERATING HRS: 8760 hr/yr						ALLOWABLE		COMPANY ACTUAL				
			POTENTIAL EMISSIONS												
			BEFORE CONTROLS			AFTER CONTROLS									
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	BEFORE CONTROLS	AFTER CONTROLS			
PM	10	0.999	25.2450	605.88	110.5731	0.0252	0.1106	0.0007	0	0.0000	72.1250	0.0721			
PM10	6.93	0.999	17.4948	419.87	76.6272	0.0175	0.0766	0.0005	1.030	4.5114	49.9826	0.0500			
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000			
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000			
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000			
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000			
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!			

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

*E.F. = ACTUAL EMISSION (0.25)/(1-CE)/MDR(T/HR)--FOUND IN LEVER BROTHERS BOOK #1.

P18; S1: Soap Noodle Bin #1 DC System (DC-5)

MDR (T/hr): 11.82
YEARLY PROD (T/yr): 13,081

STACK ID (DIAM:HEIGHT): 1.50' : 98'

FLOWRATE (ACFM): 1,200

Stack 20, Bldg. 15

Ts(°F): 70

CNTRL DEV: STERNVENT BIN VENT DUST COLLECTOR (DC-5)

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	8.72	0.999	103.0000	2,472.00	451.1400	0.1030	0.4511	0.0100	0	0.0000	57.0183	0.0570
PM10	6.10	0.999	72.1000	1,730.40	315.7980	0.0721	0.3158	0.0070	0.210	0.9198	39.9128	0.0399
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

*E.F. = ACTUAL EMISSION (0.103)/(1-CE)/MDR(T/HR)--FOUND IN LEVER BROTHERS BOOK #2. MDR from Book#2 = 16,200 lbs/hr

P19; S1: Soap Noodle Bin #2 DC System (DC-6)

MDR (T/hr): 11.82
YEARLY PROD (T/yr): 10,749

STACK ID (DIAM:HEIGHT): 1.50' : 98'

FLOWRATE (ACFM): 1,200

Stack 21, Bldg. 15

Ts(°F): 70

CNTRL DEV: STERNVENT BIN VENT DUST COLLECTOR (DC-6)

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	8.71	0.999	103.0000	2,472.00	451.1400	0.1030	0.4511	0.0100	0	0.0000	46.8336	0.0468
PM10	6.10	0.999	72.1000	1,730.40	315.7980	0.0721	0.3158	0.0070	0.210	0.9198	32.7835	0.0328
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

*E.F. = ACTUAL EMISSION (0.103)/(1-CE)/MDR(T/HR)--FOUND IN LEVER BROTHERS BOOK #2. MDR from Book#2 = 16,200 lbs/hr

P20; S1: Soap Noodle Bin #3 DC System (DC-7)
 Stack 22, Bldg. 15
 CNTRL DEV: STERNVENT BIN VENT DUST COLLECTOR (DC-7)

MDR (T/hr): 11.82
 YEARLY PROD (T/yr): 11,690

STACK ID (DIAM:HEIGHT): 1.50' : 98'
 FLOWRATE (ACFM): 1,200
 Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	8.72	0.999	103.0000	2,472.00	451.1400	0.1030	0.4511	0.0100	0	0.0000	50.9551	0.0510
PM10	6.10	0.999	72.1000	1,730.40	315.7980	0.0721	0.3158	0.0070	0.210	0.9198	35.6686	0.0357
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

*E.F. = ACTUAL EMISSION (0.103)/(1-CE)/MDR(T/HR)--FOUND IN LEVER BROTHERS BOOK #2. MDR from Book#2 = 16,200 lbs/hr

P21; S1: Chip Mixer #1 DC System (DC-8)
 Stack 23 Bldg. 15
 CNTRL DEV: STERNVENT BIN VENT DUST COLLECTOR (DC-8)

MDR (T/hr): 11.82
 YEARLY PROD (T/yr): 13,397

STACK ID (DIAM:HEIGHT): 0.75' : 59.6'
 FLOWRATE (ACFM): 1,200
 Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	8.72	0.999	103.0000	2,472.00	451.1400	0.1030	0.4511	0.0100	0	0.0000	58.3957	0.0584
PM10	6.10	0.999	72.1000	1,730.40	315.7980	0.0721	0.3158	0.0070	0.720	3.1536	40.8770	0.0409
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

* Combined limit for Stacks 23, 24, & 25

*E.F. = ACTUAL EMISSION (0.103)/(1-CE)/MDR(T/HR)--FOUND IN LEVER BROTHERS BOOK #2. MDR from Book#2 = 16,200 lbs/hr

P22; S1: Chip Mixer #2 DC System (DC-9)

Stack 23 Bldg. 15

CNTRL DEV: STERNVENT BIN VENT DUST COLLECTOR (DC-9)

MDR (T/hr): 11.82
YEARLY PROD (T/yr): 11,009

STACK ID (DIAM:HEIGHT): 0.75' : 59.6'

FLOWRATE (ACFM): 1,200

Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	8.72	0.999	103.0000	2,472.00	451.1400	0.1030	0.4511	0.0100	0	0.0000	47.9868	0.0480
PM10	6.10	0.999	72.1000	1,730.40	315.7980	0.0721	0.3158	0.0070	0.720	3.1536	33.5907	0.0336
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

* Combined limit for Stacks 23, 24, & 25

*E.F. = ACTUAL EMISSION (0.103)/(1-CE)/MDR(T/HR)--FOUND IN LEVER BROTHERS BOOK #2. MDR from Book#2 = 16,200 lbs/hr

P23; S1: Chip Mixers #3 & #4 DC System (DC-10)

Stack 23 Bldg. 15

CNTRL DEV: STERNVENT BIN VENT DUST COLLECTOR (DC-2)

MDR (T/hr): 11.82
YEARLY PROD (T/yr): 11,972

STACK ID (DIAM:HEIGHT): 0.75' : 59.6'

FLOWRATE (ACFM): 1,350

Ts(°F): 80

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	8.72	0.999	103.0000	2,472.00	451.1400	0.1030	0.4511	0.0091	0	0.0000	52.1843	0.0522
PM10	6.10	0.999	72.1000	1,730.40	315.7980	0.0721	0.3158	0.0063	0.720	3.1536	36.5290	0.0365
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

* Combined limit for Stacks 23, 24, & 25

*E.F. = ACTUAL EMISSION (0.103)/(1-CE)/MDR(T/HR)--FOUND IN LEVER BROTHERS BOOK #2. MDR from Book#2 = 16,200 lbs/hr

P24; S1: Powder Dye DC System
 Stack 26, Bldg. 15
 CNTRL DEV: TORIT DUST COLLECTOR (DC-4)

MDR (T/hr): 0.005
 YEARLY PROD (T/yr): 1

STACK ID (DIAM:HEIGHT): 1.5' : 99'
 FLOWRATE (ACFM): 750
 Ts(°F): 80

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	200	0.999	1.0000	24.00	4.3800	0.0010	0.0044	0.0002	0	0.0000	0.1000	0.000100
PM10	140	0.999	0.7000	16.80	3.0660	0.0007	0.0031	0.0001	0.130	0.5694	0.0700	0.000070
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.000000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.000000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.000000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.000000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

EF based on an actual recovery (from collector) of 10 lbs, after one hour of powdered dye addition

EF = 10 lbs/hr

Lever uses one (1) ton of this material per year

P25; S1: Catalyst Weigh Station Dust Collector
 Stack 27, Bldg. 15
 CNTRL DEV: TORIT DUST COLLECTOR (DC-3)
 (was Rework Soap DC)

MDR (T/hr): 9
 YEARLY PROD (T/yr): 43,566

STACK ID (DIAM:HEIGHT): 1.5' : 99'
 FLOWRATE (ACFM): 4,725
 Ts(°F): 80

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	2.3	0.999	21.0000	504.00	91.9800	0.0210	0.0920	0.0005	0.021	0.0920	50.8270	0.0508
PM10	1.63	0.999	14.7000	352.80	64.3860	0.0147	0.0644	0.0004	0.800	3.5040	35.5789	0.0356
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM: Hammond Air Quality Control Ordinance No. 3522 (as amended)
 (local only)

*E.F. = ACTUAL EMISSION (0.021)/(1-CE)/MDR(T/HR)--FOUND IN LEVER BROTHERS Construction Permit (8/13/96)

PM10: 326 IAC 6-1-10.1(d)

P26; S1: Milling & Pelletizing DC System
Stack 28, Bldg. 15
CNTRL DEV: TORIT DUST COLLECTOR (DC-1)

MDR (T/hr): 8.71
YEARLY PROD (T/yr): 54,569

STACK ID (DIAM:HEIGHT): 1.3' : 41'
FLOWRATE (ACFM): 6,000
Ts(°F): 80

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	90.47	0.999	788.0000	18,912.00	3,451.4400	0.7880	3.4514	0.0156	0.788	3.4514	2,468.4485	2.4684
PM10	63.33	0.999	551.6000	13,238.40	2,416.0080	0.5516	2.4160	0.0109	1.03	4.5114	1,727.9139	1.7279
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM: Hammond Air Quality Control Ordinance No. 3522 (as amended)
(local only)
PM10: 326 IAC 6-1-10.1(d)

EF = 0.788/(1-CE)/MDR; Review - Construction Permit (8/13/96)

P27; S1: 3- Chill Rolls & Apron Conv. DC System (DC-2)
Stack 29, Bldg. 15
CNTRL DEV: AIRTROL AIR-PULSE DC SYSTEM (DC-10)

MDR (T/hr): 9
YEARLY PROD (T/yr): 49,055

STACK ID (DIAM:HEIGHT): 1.83' : 98.3'
FLOWRATE (ACFM): 6,600
Ts(°F): 90

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	31.11	0.999	280.0000	6,720.00	1,226.4000	0.2800	1.2264	0.0051	0	0.0000	763.0778	0.7631
PM10	21.78	0.999	196.0000	4,704.00	858.4800	0.1960	0.8585	0.0036	1.090	4.7742	534.1544	0.5342
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MAJOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

* E.F. = ACTUAL EMISSION (0.28)/(1-CE)/MDR(T/HR)--FOUND IN LEV BROS. INSTALLATION
OF DC SYSTEM FOR 3 CHILL ROLLS & APRON CONVEYOR-DATED 5/5/87.

P28; S1: Bulk Urea Handling System (Stack 30); Facility Closed

P29; S1: American Hydrotherm Heater #2
(Natural Gas Combustion)
Stack 1A, Bldg 15A

MDC (mmBtu/hr): 12.22
MDR (mmcft/hr): 0.0116

HEAT CONTENT (Btu/cft): 1,050
QTY BURNED (mmcft/yr): 47.000

STACK ID (DIAM:HEIGHT): 2.67':98.5"
FLOWRATE (ACFM): 4,162
Ts(°F): 361

CNTRL DEV: NONE PERMITTED OPERATING HRS: 8760 hr/yr

3-90-006-89			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
POLLUTANT	EF(lbs/MMcft)	CE (%)	BEFORE CONTROLS			AFTER CONTROLS			(lbs/hr)	(TPY)	BEFORE	AFTER
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)			CONTROLS	CONTROLS
PM	3	0	0.0349	0.8379	0.1529	0.0349	0.1529	0.0015	See Below	See Below	0.0705	0.0705
PM10	3	0	0.0349	0.8379	0.1529	0.0349	0.1529	0.0015	See Below	See Below	0.0705	0.0705
SOx	0.6	0	0.0070	0.1676	0.0306	0.0070	0.0306	N/A	See Below	See Below	0.0141	0.0141
NOx	100	0	1.1638	27.9314	5.0975	1.1638	5.0975	N/A	See Below	See Below	2.3500	2.3500
VOC	5.3	0	0.0617	1.4804	0.2702	0.0617	0.2702	N/A	See Below	See Below	0.1246	0.1246
CO	84	0	0.9776	23.4624	4.2819	0.9776	4.2819	N/A	See Below	See Below	1.9740	1.9740
LEAD	0.0005	0	0.0000	0.0001	0.0000	0.0000	0.0000	N/A	See Below	See Below	0.0000	0.0000

*THIS POINT IS CLASSED "REGISTERED" ACCORDING TO THE POTENTIAL EMISSIONS.

P29; S2: American Hydrotherm Heater #2
(No. 2 Fuel Oil Combustion)
Stack 1A, Bldg 15A

MDC (mmBtu/hr): 12.22
MDR (mgal/hr): 0.0815
QTY BURNED (mgal/yr): 0.00

HEAT CONTENT (Btu/gal): 150,000
ASH CONTENT (%): 1
SULFUR CONTENT (%): 0.5

STACK ID (DIAM:HEIGHT): 2.67':98.5"
FLOWRATE (ACFM): 4,162
Ts(°F): 361

CNTRL DEV: NONE

PERMITTED OPERATING HRS: 8760 hr/yr

3-90-004-89			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
POLLUTANT	EF(lbs/mgal)	CE (%)	BEFORE CONTROLS			AFTER CONTROLS			(lbs/hr)	(TPY)	BEFORE	AFTER
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)			CONTROLS	CONTROLS
PM	2	0	0.1629	3.9104	0.7136	0.1629	0.7136	0.0071	See Below	See Below	0.0000	0.0000
PM10	1	0	0.0815	1.9552	0.3568	0.0815	0.3568	0.0035	See Below	See Below	0.0000	0.0000
SOx	71	0	2.8921	69.4096	12.6673	2.8921	12.6673	N/A	See Below	See Below	0.0000	0.0000
NOx	20	0	1.6293	39.1040	7.1365	1.6293	7.1365	N/A	See Below	See Below	0.0000	0.0000
VOC	0.2	0	0.0163	0.3910	0.0714	0.0163	0.0714	N/A	See Below	See Below	0.0000	0.0000
CO	5	0	0.4073	9.7760	1.7841	0.4073	1.7841	N/A	See Below	See Below	0.0000	0.0000
LEAD	0.00124	0	0.0001	0.0024	0.0004	0.0001	0.0004	N/A	See Below	See Below	0.0000	0.0000

Sub-Totals for American Hydrotherm Heater #2

			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
POLLUTANT			BEFORE CONTROLS			AFTER CONTROLS			(lbs/hr)	(TPY)	BEFORE	AFTER
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)			CONTROLS	CONTROLS
PM			0.1629	3.9104	0.7136	0.1629	0.7136	0.0071			0.0705	0.0705
PM10			0.0815	1.9552	0.3568	0.0815	0.3568	0.0035	1.830	8.0154	0.0705	0.0705
SOx			2.8921	69.4096	12.6673	2.8921	12.6673	N/A	3.6660	16.0571	0.0141	0.0141
NOx			1.6293	39.1040	7.1365	1.6293	7.1365	N/A			2.3500	2.3500
VOC			0.0617	1.4804	0.2702	0.0617	0.2702	N/A			0.1246	0.1246
CO			0.4073	9.7760	1.7841	0.4073	1.7841	N/A			1.9740	1.9740
LEAD			0.0001	0.0024	0.0004	0.0001	0.0004	N/A			0.0000	0.0000

*THIS POINT IS CLASSED "REGISTERED" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

SO2: 326 IAC 7-4-1.1(a) 0.3 lb/MMBtu

P30; S1: Schneible Wet Scrubber & Demister #2
Stack 2A, Bldg. 15

MDR (T/hr): 0.8715
YEARLY PROD (T/yr): 5,677

STACK ID (DIAM:HEIGHT): 1.0' : 103.5'
FLOWRATE (ACFM): 4,000
Ts(°F): 70

SCC NO. 3-01-009-99			PERMITTED OPERATING HRS: 8760 hr/yr							ALLOWABLE		COMPANY ACTUAL	
			POTENTIAL EMISSIONS										
			BEFORE CONTROLS			AFTER CONTROLS			(lbs/hr)	(TPY)	(lbs/hr)	(TPY)	BEFORE CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)			
PM	8.70	0.99	7.5821	181.97	33.2094	0.0758	0.3321	0.0022	0	0.0000	24.6950	0.2469	
PM10	6.09	0.99	5.3074	127.38	23.2466	0.0531	0.2325	0.0015	1.030	4.5114	17.2865	0.1729	
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000	
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000	
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000	
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000	
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!	

*THIS POINT IS CLASSED "MINOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

EF = 5.2 batch/hr x 1.66 lbs vapors/batch = 8.632 lbs/hr - see Review (1/26/89)

P31; S1: Flex-Kleen (DC-1053) System
Stack 3A, Bldg. 15A

MDR (T/hr): 2.988
YEARLY PROD (T/yr): 16,255

STACK ID (DIAM:HEIGHT): 1.67' : 98.5'
FLOWRATE (ACFM): 5,600
Ts(°F): 70

SCC NO. 3-01-009-99			PERMITTED OPERATING HRS: 8760 hr/yr							ALLOWABLE		COMPANY ACTUAL	
			POTENTIAL EMISSIONS										
			BEFORE CONTROLS			AFTER CONTROLS							
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	BEFORE CONTROLS	AFTER CONTROLS	
PM	2.01	0.999	6.0000	144.00	26.2800	0.0060	0.0263	0.0001	0	0.0000	16.3198	0.0163	
PM10	1.41	0.999	4.2000	100.80	18.3960	0.0042	0.0184	0.0001	0.940	4.1172	11.4238	0.0114	
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000	
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000	
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000	
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000	
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!	

*THIS POINT IS CLASSED "MINOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

EF = 0.006/(1-0.999)/2.988 = 2.01 - See Review (1/26/89)

P32; S1: Flex-Kleen (DC-1054) System
Stack 4A, Bldg. 15A

MDR (T/hr): 2.988
YEARLY PROD (T/yr): 14,694

STACK ID (DIAM:HEIGHT): 1.67' : 98.5'
FLOWRATE (ACFM): 5,600
Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	2.01	0.999	6.0000	144.00	26.2800	0.0060	0.0263	0.0001	0	0.0000	14.7525	0.0148
PM10	1.41	0.999	4.2000	100.80	18.3960	0.0042	0.0184	0.0001	0.940	4.1172	10.3268	0.0103
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MINOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

EF = 0.006/(1-0.999)/2.988 = 2.01 - See Review (1/26/89)

P33; S1: Flex-Kleen (DC-1055) System
Stack 5A, Bldg. 15A

MDR (T/hr): 2.988
YEARLY PROD (T/yr): 9,635

STACK ID (DIAM:HEIGHT): 1.67' : 98.5'
FLOWRATE (ACFM): 5,600
Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	2.01	0.999	6.0000	144.00	26.2800	0.0060	0.0263	0.0001	0	0.0000	9.6734	0.0097
PM10	1.41	0.999	4.2000	100.80	18.3960	0.0042	0.0184	0.0001	0.940	4.1172	6.7714	0.0068
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MINOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

EF = 0.006/(1-0.999)/2.988 = 2.01 - See Review (1/26/89)

P34; S1: Flex-Kleen (DC-1056) System
Stack 6A, Bldg. 15A

MDR (T/hr): 2.988
YEARLY PROD (T/yr): 11,766

STACK ID (DIAM:HEIGHT): 1.67' : 98.5'
FLOWRATE (ACFM): 5,600
Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	2.01	0.999	6.0000	144.00	26.2800	0.0060	0.0263	0.0001	0	0.0000	11.8129	0.0118
PM10	1.41	0.999	4.2000	100.80	18.3960	0.0042	0.0184	0.0001	0.940	4.1172	8.2690	0.0083
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MINOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

EF = 0.006/(1-0.999)/2.988 = 2.01 - See Review (1/26/89)

P35; S1: Flex-Kleen (DC-1052) System
Stack 7A, Bldg. 15A

MDR (T/hr): 2.988
YEARLY PROD (T/yr): 21,401

STACK ID (DIAM:HEIGHT): 2.0' : 98.5'
FLOWRATE (ACFM): 12,450
Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	2.68	0.999	8.0000	192.00	35.0400	0.0080	0.0350	0.0001	0	0.0000	28.6484	0.0286
PM10	1.87	0.999	5.6000	134.40	24.5280	0.0056	0.0245	0.0001	2.130	9.3294	20.0538	0.0201
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MINOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

EF = 0.008/(1-0.999)/2.988 = 2.68 - See Review (1/26/89)

P36; S1: Flex-Kleen (DC-1051) System
Stack 8A, Bldg. 15A

MDR (T/hr): 2.988
YEARLY PROD (T/yr): 30,949

STACK ID (DIAM:HEIGHT): 2.0' : 98.5'
FLOWRATE (ACFM): 12,450
Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
POLLUTANT	EF(LB/T)	CE (%)	BEFORE CONTROLS			AFTER CONTROLS			(lbs/hr)	(TPY)	BEFORE CONTROLS	AFTER CONTROLS
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)				
PM	2.39	0.999	7.1370	171.29	31.2601	0.0071	0.0313	0.0001	0	0.0000	36.9617	0.0370
PM10	1.67	0.999	4.9959	119.90	21.8820	0.0050	0.0219	0.0000	2.130	9.3294	25.8732	0.0259
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MINOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

EF = 0.007/(1-0.999)/MDR from original review, MDR modified during review (12/7/99).

EF increased to 2.39 lb/T for addition of bulk bagging system to Silo #6 - See Review (12/7/99).

P37; S1: Bulk Borax Unloading to Elevated Silo (Stack 9A); Facility Closed

P38; S1: Liquid Detergent Process Line #3 (Stack 10A); Facility Closed

P39; S1: Liquid Detergent Process Line #4 (Stack 11A); Facility Closed

P40; S1: Liquid Detergent Process Line #5 (Stack 12A); Facility Closed

P41; S1: Six Liquid Detergent Relay Tanks (Stack 13A); Facility Closed

P42; S1: Enzyme Solution Storage Tanks (2) & Proportional Mixer (Stack 14A); Facility Closed

P43; S1: Oil Refinery Filter Aid Bag Dumping Operation #2, Tank #44 (Stack 15A); Facility Closed

P44; S1: Detergent Bar Soap Mfg. Process #2 (Stack 16A); Facility Closed

P45; S1: Sample Detergent Bar Soap Line
Stack 17A, Bldg. 14
CNTRL DEV: TORIT DUST COLLECTOR

MDR (T/hr): 0.844
YEARLY PROD (T/yr): 1,007

STACK ID (DIAM:HEIGHT): 1.25' : 96.96'
FLOWRATE (ACFM): 2,350
Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	2.37	0.999	2.0003	48.0067	8.7612	0.0020	0.0088	0.0001	0	0.0000	1.1933	0.0012
PM10	1.66	0.999	1.4002	33.6047	6.1329	0.0014	0.0061	0.0001	0.002	0.0088	0.8353	0.0008
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "REGISTERED" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

* E.F. FOUND IN LEVER BROTHERS SAMP. DETER. BAR SOAP LINE OPER. REVIEW DATED 10/89.

P46; S1: Soap Dryer Cleanout System, Tank #1
Stack 18A, Bldg. 14
CNTRL DEV: FLEXI-CHEVRON MIST ELIMINATOR

MDR (T/hr): 84
YEARLY PROD (T/yr): 9

STACK ID (DIAM:HEIGHT): 1' : 90.75'
FLOWRATE (ACFM): 1,500
Ts(°F): 212

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	0.003	0.99	0.2500	6.0000	1.0950	0.0025	0.0110	0.0002	0	0.0000	0.0000134	0.0000001
PM10	0.003	0.99	0.2500	6.0000	1.0950	0.0025	0.0110	0.0002	0.390	1.7082	0.0000134	0.0000001
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000000	0.0000000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000000	0.0000000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000000	0.0000000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000000	0.0000000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "REGISTERED" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

EF - see INSTALLATION OF SOAP DRYER / CLEANOUT SYSTEM (TANK NO.1 AND NO.2) BOOK DATED 04/09/87.

P47; S1: Soap Dryer Cleanout System, Tank #2
Stack 19A, Bldg. 14
CNTRL DEV: IMPINGEMENT SEPARATOR

MDR (T/hr): 84
YEARLY PROD (T/yr): 9

STACK ID (DIAM:HEIGHT): 1' : 90.75'
FLOWRATE (ACFM): 1,500
Ts(°F): 212

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	0.010	0.99	0.8600	20.6400	3.7668	0.0086	0.0377	0.0008	0	0.0000	0.0000461	0.0000005
PM10	0.010	0.99	0.8600	20.6400	3.7668	0.0086	0.0377	0.0008	0.300	1.3140	0.0000461	0.0000005
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000000	0.0000000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000000	0.0000000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000000	0.0000000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000000	0.0000000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "REGISTERED" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM10: 326 IAC 6-1-10.1(d)

EF - see INSTALLATION OF SOAP DRYER / CLEANOUT SYSTEM (TANK NO. 1 AND NO.2) BOOK DATED 04/09/87.

P48; S1: No. 1 and No. 2 Noodle Bins
DC-14-4-30538, Bldg. 14
CNTRL DEV: Flex Kleen DC

MDR (T/hr): 5.00
YEARLY PROD (T/yr): 5,266

STACK ID (DIAM:HEIGHT): 0.84' : 100'
FLOWRATE (ACFM): 2,420
Ts(°F): 80

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-009-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE CONTROLS	AFTER CONTROLS
POLLUTANT	EF(LB/T)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)		
PM	1.20	0.999	6.0000	144.0000	26.2800	0.0060	0.0263	0.0003	0.0060	0.0263	3.1596	0.0032
PM10	0.84	0.999	4.2000	100.8000	18.3960	0.0042	0.0184	0.0002	0.0042	0.0184	2.2117	0.0022
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

*THIS POINT IS CLASSED "MINOR" ACCORDING TO THE POTENTIAL EMISSIONS.

Applicable Reg: PM: Hammond Air Quality Control Ordinance No. 3522 (as amended)
PM10: Hammond Air Quality Control Ordinance No. 3522 (as amended)
(both local only)

*E.F. = From Review of Application

P49; S1: POWERHOUSE BOILER #1 MDC (mmBtu/hr): 120 HEAT CONTENT (Btu/cft): 1,050 STACK ID (DIAM:HEIGHT): 7' : 153'
(Natural Gas Combustion) MDR (mmcft/hr): 0.1143 QTY BURNED (mmcft/yr): 326.00 FLOWRATE (ACFM): 30,149
Shares stack 1 with Boiler #2, Bldg. 8 Ts(°F): 345

CNTRL DEV: FLUE GAS RECIRCULATION & PERMITTED OPERATING HRS: 8060 hr/yr

LOW NOx BURNERS			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
SCC NO. 1-02-006-02			BEFORE CONTROL			AFTER CONTROL					BEFORE	AFTER
POLLUTANT	EF(lbs/mmcft)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	7.695	0	0.8794	21.1063	3.5441	0.8794	3.5441	0.0052	See Below	See Below	1.2543	1.2543
PM10	7.695	0	0.8794	21.1063	3.5441	0.8794	3.5441	0.0052	See Below	See Below	1.2543	1.2543
SOx	0.6156	0	0.0704	1.6885	0.2835	0.0704	0.2835	N/A	See Below	See Below	0.1003	0.1003
NOx	41.04	0	4.6903	112.5669	18.9019	4.6903	18.9019	N/A	See Below	See Below	6.6895	6.6895
VOC	8.208	0	0.9381	22.5134	3.7804	0.9381	3.7804	N/A	See Below	See Below	1.3379	1.3379
CO	70.2663	0	8.0304	192.7304	32.3627	8.0304	32.3627	N/A	See Below	See Below	11.4534	11.4534
LEAD	0.0005	0	0.0001	0.0014	0.0002	0.0001	0.0002	N/A	See Below	See Below	0.0001	0.0001

EFs modified upon company request and in accordance with EPA bulletin board (original review)

P49; S2: POWERHOUSE BOILER #1 MDC (mmBtu/hr): 120 HEAT CONTENT (Btu/gal): 138,000 STACK ID (DIAM:HEIGHT): 7' : 153'
(No. 2 Fuel Oil Combustion) MDR (mgal/hr): 0.8696 ASH CONTENT (%): 0.01 FLOWRATE (ACFM): 29,494
Stack 1, Bldg. 8 QTY BURNED (mgal/yr): 0.00 SULFUR CONTENT (%): 0.5 Ts(°F): 345

CNTRL DEV: NONE

PERMITTED OPERATING HRS: 700 hr/yr

SCC NO. 1-02-005-01			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
			BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
POLLUTANT	EF(lbs/mgal)	CE (%)	(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)	(lbs/hr)	(TPY)	CONTROLS	CONTROLS
PM	6.9	0	6.0000	144.0000	2.1000	6.0000	2.1000	0.0360	See Below	See Below	0.0000	0.0000
PM10	6.9	0	6.0000	144.0000	2.1000	6.0000	2.1000	0.0360	See Below	See Below	0.0000	0.0000
SOx	13.632	0	11.8539	284.4939	4.1489	11.8539	4.1489	N/A	See Below	See Below	0.0000	0.0000
NOx	20	0	17.3913	417.3913	6.0870	17.3913	6.0870	N/A	See Below	See Below	0.0000	0.0000
VOC	0.662	0	0.5757	13.8157	0.2015	0.5757	0.2015	N/A	See Below	See Below	0.0000	0.0000
CO	9.408	0	8.1809	196.3409	2.8633	8.1809	2.8633	N/A	See Below	See Below	0.0000	0.0000
LEAD	0.004	0	0.0035	0.0835	0.0012	0.0035	0.0012	N/A	See Below	See Below	0.0000	0.0000

*Potential for 700 hours fuel oil #2, equivalent to 600,000 gallons, emergency backup fuel option requested. Fuel Oil capability has not been installed.

Sub-Totals for Powerhouse Boiler #1

		POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
		BEFORE CONTROLS			AFTER CONTROLS					BEFORE	AFTER
		(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)			CONTROLS	CONTROLS
POLLUTANT											
PM	6.0000	144.0000	5.6441	6.0000	5.6441	0.0412	6.0000	26.2800	1.2543	1.2543	
PM10	6.0000	144.0000	5.6441	6.0000	5.6441	0.0412	6.0000	5.6441	1.2543	1.2543	
SOx	11.8539	284.4939	4.4324	11.8539	4.4324	#VALUE!	60.0000	19.4139	0.1003	0.1003	
NOx	17.3913	417.3913	24.9888	17.3913	24.9888	#VALUE!	24.0000	109.4510	6.6895	6.6895	
VOC	0.9381	22.5134	3.9818	0.9381	3.9818	#VALUE!	0.9381	3.9818	1.3379	1.3379	
CO	8.1809	196.3409	35.2260	8.1809	35.2260	#VALUE!	8.1809	35.2260	11.4534	11.4534	
LEAD	0.0035	0.0835	0.0014	0.0035	0.0014	#VALUE!	0.0035	0.0014	0.0001	0.0001	

PM10, VOC, CO & Lb: Hammond Air Quality Control Ordinance No. 3522 (as amended)
allowable under local, potential emissions after controls.

**Natural gas and #2 fuel oil are not used simultaneously, therefore, instantaneous rates lbs/hr and lbs/day are not added, choose worst case.

This is the potential to emit from the limited gallons of fuel oil use and remaining hours of natural gas use that results in total less than 25 TPY NOx.

Applicable Reg: 40 CFR 60 Subpart Db
(PM= 0.05 lbs per MMBtu; SO2= 0.5 lbs per MMBtu/hr (VLSO); & NOx= 0.2 lbs per MMBtu/hr)

P50; S1: Preservative Addition System
 Building 15
 CNTRL DEV: Bin Vent Dust Collector

MDR (T/hr): 1
 YEARLY PROD (T/yr): 350

STACK ID (DIAM:HEIGHT): 0.5' : 123.5'
 FLOWRATE (ACFM): 400
 Ts(°F): 70

PERMITTED OPERATING HRS: 8760 hr/yr

SCC NO. 3-01-999-99			POTENTIAL EMISSIONS						ALLOWABLE		COMPANY ACTUAL	
POLLUTANT	EF(LB/T)	CE (%)	BEFORE CONTROLS			AFTER CONTROLS			(lbs/hr)	(TPY)	BEFORE CONTROLS	AFTER CONTROLS
			(lbs/hr)	(lbs/day)	(TPY)	(lbs/hr)	(TPY)	(gr/dscf)				
PM	20	0.999	20.0000	480.0000	87.6000	0.0200	0.0876	0.0058	0.0200	0.0876	3.5000	0.0035
PM10	17	0.999	17.0000	408.0000	74.4600	0.0170	0.0745	0.0050	0.0170	0.0745	2.9750	0.0030
SOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
NOx	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
VOC	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
CO	0	0	0.0000	0.0000	0.0000	0.0000	0.0000	N/A	0	0.0000	0.0000	0.0000
LEAD	---	0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	N/A	0	0.0000	#VALUE!	#VALUE!

Applicable Reg: PM: Hammond Air Quality Control Ordinance No. 3522 (as amended)
 PM10: Hammond Air Quality Control Ordinance No. 3522 (as amended)
 (both local only)

*E.F. = From Review of Application

TOTAL PLANT EMISSIONS

POLLUTANT	COMPANY POTENTIAL		COMPANY ACTUAL	
	BEFORE CONTROLS	AFTER CONTROLS	BEFORE CONTROLS	AFTER CONTROLS
PM	15,910.42	97.63	4,674.03	12.60
PM10	11,165.10	82.19	3,272.83	9.78
SOx	823.32	772.64	90.99	55.01
NOx	301.89	301.89	44.28	44.28
VOC	8.30	8.30	2.44	2.44
CO	65.35	65.35	28.65	28.65
LEAD	#VALUE!	#VALUE!	#VALUE!	#VALUE!

* THIS SOURCE IS CLASSED AS "MAJOR" ACCORDING TO POTENTIAL EMISSIONS.

Hammond Department of Environmental Management Emission Inventory System Update (EIS) Storage of Organic Liquids ... AP-42 ... Section 12

Fixed Roof Tank -Vertical

General Information:

Company Name	Unilever HPC USA
Year of Data	Permit Review
Plant ID #	229

Tank Information:

Tank ID #	Fuel Oil Day Tank	
Tank Shell Diameter.....	12	feet
Tank Shell Height.....	20	feet
Tank Capacity (max liquid).....	18,000	gallons

Product Information:

Product Stored.....	No. 6 Fuel Oil	
*Vapor Molecular Weight.....	190.0	lb/lb-mole
*True Vapor Pressure @ 60° F.....	0.000040	psia - @ 60° F
*True Vapor Pressure @ 40° F.....	0.000020	psia - @ 40° F
Annual Product Throughput.....	3,609,120	gallons/yr
Average Annual Liquid Height.....	10	feet
(If unknown, use half of tank shell height.)		

*This product information available in the AP-42, Section 12.

*if tank is not white, or if it contains crude oils - see calculations

Ls = Standing Storage Losses =	0.000010	Tons/yr
Lw = Working Losses =	0.000103	Tons/yr

Lt = Ls + Lw = Total Losses =	0.000113	Tons/yr
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See AP-42, Section 12, for clarification of the following calculations:

$$L_s = \text{Standing Storage Losses} = 365 \cdot (V_v) \cdot (W_v) \cdot (K_e) \cdot (K_s)$$

$$H_r = \text{tank roof height} = S_r \cdot R_s = 0.0625 \cdot (D/2) = 0.375 \text{ feet}$$

$$H_{ro} = \text{roof outage} = H_r/3 = 0.125 \text{ feet}$$

$$H_l = \text{liquid height (1/2 tank height if unknown)} = 10.000 \text{ feet}$$

$$H_s = \text{tank shell height} = 20.000 \text{ feet}$$

$$H_{vo} = \text{vapor space outage} = H_s - H_l + H_{ro} = 10.125 \text{ feet}$$

$$D = \text{tank diameter} = 12.000 \text{ feet}$$

$$V_v = \text{Tank Vapor Space Volume} = \left(\frac{\pi}{4} \right) \cdot (D^2) \cdot (H_{vo}) = \underline{1145.111 \text{ cft}}$$

$$M_v = \text{vapor molecular weight (Table 12.3-2 \& 3)} = 190.0 \text{ lb/lb-mole}$$

$$P_{va} = \text{vapor pressure at TL} \text{ (Table 12.3-2 \& 3)} = 0.00004 \text{ psia @ 50-60}^\circ\text{F}$$

$$T_{La} = \text{daily average liquid surface temperature}^\circ\text{R} = 510.843 \text{ }^\circ\text{R}$$

as calculated for Chicago area using AP-42, 12.3

$$W_v = \text{Vapor Density} = (M_v \cdot P_{va}) / (10.731 \cdot T_{La}) = \underline{0.0000014 \text{ lb/cft}}$$

$$T_a = \text{daily ambient temp range (Chgo area)} = 19.00 \text{ }^\circ\text{R}$$

$$= \text{tank paint solar absorptance (Table 12.3-7)} = 0.17 \text{ dimensionless}$$

*(this factor (θ) will change for non-white tanks)

$$I = \text{daily total solar insolation factor (Chgo)} = 1215 \text{ Btu/sqft} \cdot \text{day}$$

$$T_v = \text{daily vapor temp range} =$$

$$= 0.72 \cdot (T_a) + 0.028 \cdot (I) = 19.4634 \text{ }^\circ\text{R}$$

$$T_{La} = \text{daily average liquid surface temp }^\circ\text{R} = 510.843 \text{ }^\circ\text{R}$$

$$P_v = \text{daily vpr pres range} = P_{v@60} - P_{v@40} = 0.00002 \text{ psia}$$

$$P_b = \text{breather vent pressure setting range} = 0.06 \text{ psig}$$

$$P_a = \text{atmospheric pressure} = 14.7 \text{ psia}$$

$$P_{va} = \text{vapor pressure at TL} \text{ (Table 12.3-2 \& 3)} = 0.00004 \text{ psia}$$

$$K_e = \text{Vapor Space Expansion Factor} =$$

$$(\Delta T_v / T_{La}) + (\Delta P_v - \Delta P_b) / (P_a - P_{va}) = \underline{0.034020 \text{ dimensionless}}$$

$$K_s = \text{Vented Vapor Saturation Factor} =$$

$$1 / (1 + 0.053 \cdot P_{va} \cdot H_{vo}) = \underline{0.999979 \text{ dimensionless}}$$

$$L_s = \text{Standing Storage Losses, lb/yr}$$

$$L_s = 365 \cdot (V_v) \cdot (W_v) \cdot (K_e) \cdot (K_s)$$

$$\underline{L_s = 0.020 \text{ lb/yr}}$$

See AP-42, Section 12, for clarification of the following calculations:

$$L_w = \text{Working Losses} = 0.0010 * (M_v) * (P_{va}) * (Q) * (K_n) * (K_p)$$

Q = annual net thruput, bbl/yr - (42 gal/bbl) =	85,931.4 bbl/yr
VLx = tank max liquid volume - (7.481 gal/cft)	2,406.1 cft
N = # of turnovers per year = $5.614 * Q / VLx$ =	200.5 dimensionless
K _n = turnover factor, =1 unless N>36	0.3163 dimensionless
K _p = working loss product factor =	1.00 dimensionless
* K _p = 0.75 for crude oils,	
1.0 for all other products	

L_w = Working Losses, lb/yr

$$L_w = 0.0010 * (M_v) * (P_{va}) * (Q) * (K_n) * (K_p)$$

L _w =	0.207	lb/yr
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The End